GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Summary Page

Name of Facility SNF Holding Company - Riceboro

Pretreatment Permit No. GAP050246

This permit is a reissuance of an extended industrial pretreatment permit for SNF Holding Company for its organic polymer manufacturing facility. The facility discharges a maximum of 0.1 MGD of pretreated wastewater to the City of Riceboro Water Pollution Control Plant. The permit expired on September 30, 2016 and became administratively extended.

The permit was placed on public notice from October 29, 2021 to December 10, 2021.

Please Note The Following Changes to the Proposed Pretreatment Permit From The Existing Permit

- ☐ The average and maximum flowrate was increased from 0.07 MGD and 0.07 MGD, respectively, to a daily average of 0.1 MGD and daily maximum of 0.1 MGD per the requested flow increase.
- ☐ Based on the increased flow rate, the mass-based limit for BOD_5 was increased from the daily average of 146 lbs/day and daily maximum of 204 lbs/day to a daily average of 209 lbs/day and daily maximum of 292 lbs/day.
- ☐ Based on the increased flow rate, the mass-based limit for TSS was increased from the daily average of 146 lbs/day and daily maximum of 204 lbs/day to a daily average of 209 lbs/day and daily maximum of 292 lbs/day.
- ☐ Based on the increased flow rate, the mass-based limit for total arsenic was increased from 0.007 lbs/day and daily average to 0.010 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total cadmium was increased from 0.008 lbs/day and daily average to 0.012 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total chromium was increased from 0.272 lbs/day and daily average to 0.389 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total copper was increased from 0.39 lbs/day and daily average to 0.557 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total cyanide was increased from 0.048 lbs/day and daily average to 0.068 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total lead was increased from 0.06 lbs/day and daily average to 0.086 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total mercury was increased from 0.003 lbs/day and daily average to 0.004 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total molybdenum was increased from 0.006 lbs/day and daily average to 0.008 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total nickel was increased from 0.038 lbs/day and daily average to 0.054 lbs/day daily average and daily maximum.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Summary Page

- ☐ Based on the increased flow rate, the mass-based limit for total selenium was increased from 0.009 lbs/day and daily average to 0.013 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate, the mass-based limit for total silver was increased from 0.007 lbs/day and daily average to 0.010 lbs/day daily average and daily maximum.
- ☐ Based on the increased flow rate as well as the results of the nitrogen fate study and approval from the City of Riceboro, the effluent limits for total Kjeldahl nitrogen were increased from the daily average of 15 lbs/day and daily maximum of 29 lbs/day to a daily average of 33 lbs/day and daily maximum of 58 lbs/day.
- ☐ Replaced the mass-based effluent limit for oil & grease and replaced with a concentration-based daily average of 50 mg/L and daily maximum of 100 mg/L based on best professional judgment.
- ☐ Based on current production data, the mass-based limits for all pollutants listed in 40 CFR 414.11(b) have been adjusted to reflect the current process flow rate.

Standard Conditions & Boilerplate Modifications

The permit boilerplate includes modified language or added language consistent with other Pretreatment permits.

Final Permit Determinations and Public Comments

- ☐ Final issued permit did not change from the draft permit placed on public notice.
- ☒ Public comments were received during public notice period.
- ☐ Public hearing was held.
- ☒ Final permit includes changes from the draft permit placed on public notice. See attached permit revisions and/or permit fact sheet revisions document(s)

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

EPD Director's Office
2 Martin Luther King, Jr. Drive
Suite 1456, East Tower
Atlanta, Georgia 30334
404-656-4713

Mr. Clint Herring, Vice President Operations
SNF Holding Company
P.O. Box 250
Riceboro, Georgia 31323

12/20/2021

RE: Permit Issuance
SNF Holding Company
Pretreatment Permit GAP050246
Liberty County, Ogeechee River Basin

Dear Mr. Herring:

Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached permit for the above-referenced facility.

Your facility has been assigned to the following EPD office for reporting and compliance. Signed copies of all required reports shall be submitted to the following address:

Environmental Protection Division
Coastal District Office
400 Commerce Center Drive
Brunswick, Georgia 31523-8251

Please be advised that on and after the effective date indicated in the permit, the permittee must comply with all terms, conditions, and limitations of the permit. If you have questions concerning this correspondence, please contact Shante Bailey at 470-524-5789 or *Shante.Bailey @dnr.ga.gov*.

Sincerely,

Richard E. Dunn
Director

RED:sb
Enclosure(s)
EPD Coastal District (Brunswick) Office -- Mr. Jed Hewitt (jed.hewitt@dnr.ga.gov)
Sr. Environmental & PSM Manager – Ms. Karen Dorman (KDorman@snf.com)
City of Riceboro – Ms. Melinda McIver (mmciver@cityofriceboro.org)

Public Comments and EPD Responses on Draft Pretreatment Permit
SNF Holding Company – Permit No. GAP050246

COMMENT RECEIVED	EPD RESPONSE
Condition I.D.2: This new condition lists a date prior to the effective date for the renewed permit. SNF cannot retroactively comply with a new condition. Please change the beginning of this condition to, "Upon the effective date of this permit, the permittee…"	The federal NPDES Electronic Reporting Rule, 40 CFR Part 127 was published in October 2015 and then revised on January 4, 2021. The Phase II compliance date was updated from December 21, 2020 to December 21, 2025. The proposed permit has been updated to reflect the new date.
Condition III.A.1.: We are assuming that this condition, regarding "All previous State wastewater permits issued to this facility…are hereby revoked…" applies only to the previous versions of this IPP. Specifically, SNF's direct NPDES discharge permit and its coverage under Georgia's General Permit for Storm Water Discharge are not affected by this boiler-plate condition.	The permittees interpretation is correct. Part III.A.1 of the proposed permit applies only to the previous issuance of industrial pretreatment permit no. GAP050246. The permit condition does not extend to NPDES no. GA0046582 or coverage under EPD's General NPDES Permit for Storm Water Discharges Associated with Industrial Activity.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Revisions to Draft Permit

Name of Facility SNF Holding Company

Pretreatment Permit No. GAP050246

Were there any revisions between the draft proposed NPDES permit placed on public notice and the final proposed NPDES permit? If yes, specify: ☒ Yes ☐ No

Part I.D – Reporting Requirements

- Updated to December 21, 2025, per the revised federal NPDES Electronic Reporting Rule.

The permittee has been made aware of these changes.

Permit No. GAP05024
Issuance Date:12/20/2021

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Industrial Pretreatment Permit

In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

SNF Holding Company
P.O. Box 250
Riceboro, Georgia 31323

is authorized to discharge from a facility located at

1 Chemical Plant Road
Riceboro, Georgia 31323
(Liberty County)

to the sewerage system tributary to the

City of Riceboro Water Pollution Control Plant (Ogeechee River Basin)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit.

This permit is issued in reliance upon the permit application signed on March 24, 2016, and any other applications upon which this permit is based, supporting data entered therein or attached thereto, and any subsequent submittal of supporting data.

This facility is subject to the terms, conditions and requirements of 40 Code of Federal Regulations (CFR) Part 403 and the Georgia Water Quality Control Act Chapter 391-3-6.

This facility is subject to the requirements of 40 CFR 414 Organic Chemicals, Plastics, and Synthetic Fibers, Subpart F – Commodity Organic Chemicals, Pretreatment Standards for Existing Sources (PSES), Subpart H – Specialty Organic Chemicals, Pretreatment Standards for Existing Sources (PSES), and Subpart K – Indirect Discharge Point Sources.

This permit shall become effective on January 1, 2022.

This permit and the authorization to discharge shall expire at midnight December 31, 2026.

STATE OF GEORGIA
CONSTITUTION
WISDOM
JUSTICE
MODERATION
1776

Richard E. Dunn, Director
Environmental Protection Division

PART I

A. Effluent Limitations and Monitoring Requirements

1. During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall no(s.) 001: Treated process wastewater to the City of Riceboro Wastewater Pollution Control Plant.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics (Specify Units)	Discharge Limitations				Monitoring Requirements [1]		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Flow (MGD)	0.1	0.1			Daily	Continuous Recording	Final Effluent[2]
Oil & Grease			50	100	1/Month	Grab	Final Effluent[2]
BOD_5	209	292			1/Month	Composite	Final Effluent[2]
TSS	209	292			1/Month	Composite	Final Effluent[2]
TKN	33	58			1/Month	Composite	Final Effluent[2]
Arsenic, Total	0.010	0.010			Quarterly	Composite	Final Effluent[2]
Cadmium, Total	0.012	0.012			Quarterly	Composite	Final Effluent[2]
Chromium, Total	0.389	0.389			Quarterly	Composite	Final Effluent[2]
Copper, Total	0.557	0.557			Quarterly	Composite	Final Effluent[2]
Cyanide, Total	0.068	0.068			Quarterly	Grab	Final Effluent[2]
Lead, Total	0.086	0.086			Quarterly	Composite	Final Effluent[2]
Mercury	0.004	0.004			Quarterly	Composite	Final Effluent[2]
Molybdenum	0.008	0.008			Quarterly	Composite	Final Effluent[2]
Nickel, Total	0.054	0.054			Quarterly	Composite	Final Effluent[2]

Effluent Characteristics (Specify Units)	Discharge Limitations				Monitoring Requirements [1]		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Selenium, Total	0.013	0.013			Quarterly	Composite	Final Effluent[2]
Silver, Total	0.010	0.010			Quarterly	Composite	Final Effluent[2]
Zinc, Total	0.876	2.18	1.050	2.610	Quarterly	Composite	Final Effluent[2]
Acenaphthene	0.016	0.039	0.019	0.047	Quarterly	Grab	Final Effluent[2]
Anthracene	0.016	0.039	0.019	0.047	Quarterly	Grab	Final Effluent[2]
Benzene	0.048	0.112	0.057	0.134	Quarterly	Grab	Final Effluent[2]
Bis(2-ethylhexyl) phthalate	0.079	0.215	0.095	0.258	Quarterly	Grab	Final Effluent[2]
Carbon Tetrachloride	0.118	0.317	0.142	0.380	Quarterly	Grab	Final Effluent[2]
Chlorobenzene	0.118	0.317	0.142	0.380	Quarterly	Grab	Final Effluent[2]
Chloroethane	0.092	0.246	0.110	0.295	Quarterly	Grab	Final Effluent[2]
Chloroform	0.093	0.271	0.111	0.325	Quarterly	Grab	Final Effluent[2]
Di-n-butyl phthalate	0.017	0.036	0.020	0.043	Quarterly	Grab	Final Effluent[2]
1,2-Dichlorobenzene	0.163	0.662	0.196	0.794	Quarterly	Grab	Final Effluent[2]
1,3-Dichlorobenzene	0.118	0.317	0.142	0.380	Quarterly	Grab	Final Effluent[2]
1,4-Dichlorobenzene	0.118	0.317	0.142	0.380	Quarterly	Grab	Final Effluent[2]
1,1-Dichloroethane	0.018	0.049	0.022	0.059	Quarterly	Grab	Final Effluent[2]
1,2-Dichloroethane	0.150	0.479	0.180	0.574	Quarterly	Grab	Final Effluent[2]
1,1-Dichloroethylene	0.018	0.050	0.022	0.060	Quarterly	Grab	Final Effluent[2]
1,2-trans-Dichloroethylene	0.021	0.055	0.025	0.066	Quarterly	Grab	Final Effluent[2]

Effluent Characteristics (Specify Units)	Discharge Limitations				Monitoring Requirements [1]		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
1,2-Dichloropropane	0.163	0.662	0.196	0.794	Quarterly	Grab	Final Effluent[2]
1,3-Dichloropropylene	0.163	0.662	0.196	0.794	Quarterly	Grab	Final Effluent[2]
Diethyl phthalate	0.038	0.094	0.046	0.113	Quarterly	Grab	Final Effluent[2]
Dimethyl phthalate	0.016	0.039	0.019	0.047	Quarterly	Grab	Final Effluent[2]
4,6-Dinitro-o-cresol	0.065	0.231	0.078	0.277	Quarterly	Grab	Final Effluent[2]
Ethylbenzene	0.118	0.317	0.142	0.380	Quarterly	Grab	Final Effluent[2]
Fluoranthene	0.018	0.045	0.022	0.054	Quarterly	Grab	Final Effluent[2]
Fluorene	0.016	0.039	0.019	0.047	Quarterly	Grab	Final Effluent[2]
Hexachlorobenzene	0.163	0.662	0.196	0.794	Quarterly	Grab	Final Effluent[2]
Hexachlorobutadiene	0.118	0.317	0.142	0.380	Quarterly	Grab	Final Effluent[2]
Hexachloroethane	0.163	0.662	0.196	0.794	Quarterly	Grab	Final Effluent[2]
Methyl Chloride	0.092	0.246	0.110	0.295	Quarterly	Grab	Final Effluent[2]
Methylene Chloride	0.030	0.142	0.036	0.170	Quarterly	Grab	Final Effluent[2]
Naphthalene	0.016	0.039	0.019	0.047	Quarterly	Grab	Final Effluent[2]
Nitrobenzene	1.866	5.339	2.237	6.402	Quarterly	Grab	Final Effluent[2]
2-Nitrophenol	0.054	0.193	0.065	0.231	Quarterly	Grab	Final Effluent[2]
4-Nitrophenol	0.135	0.480	0.162	0.576	Quarterly	Grab	Final Effluent[2]
Phenanthrene	0.016	0.039	0.019	0.047	Quarterly	Grab	Final Effluent[2]
Pyrene	0.017	0.040	0.020	0.048	Quarterly	Grab	Final Effluent[2]

Effluent Characteristics (Specify Units)	Discharge Limitations				Monitoring Requirements [1]		
	Mass Based (lbs/day)		Concentration Based (mg/L)		Measurement Frequency	Sample Type	Sample Location
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.			
Tetrachloroethylene	0.043	0.137	0.052	0.164	Quarterly	Grab	Final Effluent[2]
Toluene	0.023	0.062	0.028	0.074	Quarterly	Grab	Final Effluent[2]
1,2,4-Trichlorobenzene	0.163	0.662	0.196	0.794	Quarterly	Grab	Final Effluent[2]
1,1,1-Trichloroethane	0.018	0.049	0.022	0.059	Quarterly	Grab	Final Effluent[2]
1,1,2-Trichloroethane	0.027	0.106	0.032	0.127	Quarterly	Grab	Final Effluent[2]
Trichloroethylene	0.022	0.058	0.026	0.069	Quarterly	Grab	Final Effluent[2]
Vinyl Chloride	0.081	0.143	0.097	0.172	Quarterly	Grab	Final Effluent[2]

The pH shall not be less than 5.5 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.

The Discharge Limitations outlined above are subject to revision if dictated by Title 40, Code of Federal Regulations Part 403, (40 CFR 403), Part 414 Organic Chemicals, Plastics, and Synthetic Fibers or EPD determinations. The Permittee will be notified in writing of any changes in the above listed discharge limitations

[1] All the parameters must be monitored, at a minimum, at the measurement frequency stated above if there is any discharge. If there is no discharge, state such in the discharge monitoring report for the monitoring period.

[2] For purposes of monitoring, samples must be taken prior to entering the post equalization tank and commingling with the sanitary wastewater to ensure compliance with Title 40, Code of Federal Regulations Part 414 Organic Chemicals, Plastics, and Synthetic Fibers

B. Monitoring

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Sampling Period

a. Unless otherwise specified in this permit, quarterly samples shall be taken during the periods January-March, April-June, July-September, and October-December.

b. Unless otherwise specified in this permit, semiannual samples shall be taken during the periods January-June and July-December.

c. Unless otherwise specified in this permit, annual samples shall be taken during the period of January-December.

3. Monitoring Procedures

Analytical methods, sample containers, sample preservation techniques, and sample holding times must be consistent with the techniques and methods listed in 40 CFR Part 136. The analytical method used shall be sufficiently sensitive. EPA-approved methods must be applicable to the concentration ranges of the NPDES permit samples.

4. Detection Limit

All parameters will be analyzed using the appropriate detection limits. If the results for a given sample are such that a parameter is not detected at or above the specified detection limit, a value of "NOT DETECTED" will be reported for that sample and the detection limit will also be reported.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a. The exact place, date, and time of sampling or measurements, and the person(s) performing the sampling or the measurements;

b. The dates and times the analyses were performed, and the person(s) performing the analyses;

c. The analytical techniques or methods used;

d. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased monitoring frequency shall also be indicated. EPD may require, by written notification, more frequent monitoring or the monitoring of other pollutants not required in this permit.

7. Records Retention

The permittee shall retain records of all monitoring information, including all records of analyses performed, calibration and maintenance of instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a minimum of three (3) years from the date of the sample, measurement, report or application, or longer if requested by EPD.

8. Penalties

The Federal Clean Water Act and the Georgia Water Quality Control Act provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director of EPD.

C. Definitions

1. A "bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

2. A “calendar day” is defined as any consecutive 24-hour period.

3. A “composite” sample shall consist of samples collected at the intervals indicated in the facility’s approved Sampling Plan for a period of 24 hours or for the actual time the pretreatment facility is discharging (if less than 24 hours), and composited according to flow.

4. The "daily average” mass means the total discharge by mass during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.

5. The "daily maximum" mass means the total discharge by mass during any calendar day.

6. The "daily average" concentration means the arithmetic average of all the daily determinations of concentrations made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample.

7. The "daily maximum" concentration means the daily determination of concentration for any calendar day.

8. The “daily maximum flow” is the largest total volume determined for any 24 hour period.

9. “EPD” as used herein means the Environmental Protection Division of the Department of Natural Resources.

10. A “POTW” as used herein means Publicly-Owned Treatment Works.

11. The “Rules” as used herein means the Georgia Rules and Regulations for Water Quality Control.

12. "Severe property damage" means substantial physical damage to property, damage to treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

13. The “State Act” as used herein means the Georgia Water Quality Control Act (Official Code of Georgia Annotated; Title 12, Chapter 5, Article 2).

D. Reporting Requirements

1. The permittee must electronically report the DMR, OMR and additional monitoring data using the web based electronic NetDMR reporting system, unless a waiver is granted by EPD.

a. The permittee must comply with the Federal National Pollutant Discharge Elimination System Electronic Reporting regulations in 40 CFR §127. The permittee must electronically report the DMR, OMR, and additional monitoring data using the web based electronic NetDMR reporting system online at: https://netdmr.epa.gov/netdmr/public/home.htm

b. Monitoring results obtained during the calendar month shall be summarized for each month and reported on the DMR. The results of each sampling event shall be reported on the OMR and submitted as an attachment to the DMR.

c. The permittee shall submit the DMR, OMR and additional monitoring data no later than 11:59 p.m. on the 15th day of the month following the sampling period.

d. All other reports required herein, unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

2. **No later than December 21, 2025,** the permittee must electronically report the following compliance monitoring data and reports using the online web based electronic system approved by EPD, unless a waiver is granted by EPD:

a. Sewer Overflow/Bypass Event Reports;
b. Noncompliance Notification;
c. Other noncompliance; and
d. Bypass

3. Other Reports

All other reports required in this permit not listed above in Part I.D.2 or unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.

4. Other Noncompliance

All instances of noncompliance not reported under Part I.D. and Part II. A. shall be reported to EPD at the time the monitoring report is submitted.

5. Signatory Requirements

All reports, certifications, data or information submitted in compliance with this permit or requested by EPD must be signed and certified as follows:

a. Any State or NPDES Permit Application form submitted to the EPD shall be signed as follows in accordance with the Federal Regulations, 40 C.F.R. 122.22:

1. For a corporation, by a responsible corporate officer. A responsible corporate officer means:

i a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or

ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or

3. For a municipality, State, Federal, or other public facility, by either a principal executive officer or ranking elected official.

b. All other reports or requests for information required by the permit issuing authority shall be signed by a person designated in (a) above or a duly authorized representative of such person, if:

1. The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;

2. The authorization is made in writing by the person designated under (a) above; and

3. The written authorization is submitted to the Director.

c. Any changes in written authorization submitted to the permitting authority under (b) above which occur after the issuance of a permit shall be reported to the permitting authority by submitting a copy of a new written authorization which meets the requirements of (b) and (b.1) and (b.2) above.

d. Any person signing any document under (a) or (b) above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PART II

A. Management Requirements

1. Notification of Changes

a. The permittee shall provide EPD at least 90 days advance notice of any planned physical alterations or additions to the permitted facility that meet the following criteria:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or

3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. The permittee shall give at least 90 days advance notice to EPD of any planned changes to the permitted facility or activity which may result in noncompliance with permit requirements.

c. Following the notice in paragraph a. or b. of this condition the permit may be modified. The permittee shall not make any changes, or conduct any activities, requiring notification in paragraph a. or b. of this condition without approval from EPD.

d. The permittee shall provide at least 30 days advance notice to EPD of:

1. any planned expansion or increase in production capacity; or

2. any planned installation of new equipment or modification of existing processes that could increase the quantity of pollutants discharged or result in the discharge of pollutants that were not being discharged prior to the planned change

if such change was not identified in the permit application(s) upon which this permit is based and for which notice was not submitted under paragraphs a. or b. of this condition.

e. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 100 µg/L, (ii) five times the maximum concentration reported for that pollutant in the permit application, or (iii) 200 µg/L for acrolein and acrylonitrile, 500 µg/L for 2,4 dinitrophenol and for 2-methyl-4-6-dinitrophenol, or 1 mg/L antimony.

f. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in any discharge on a nonroutine or infrequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 500 µg/L, (ii) ten times the maximum concentration reported for that pollutant in the permit application, or (iii) 1 mg/L antimony.

g. Upon the effective date of this permit, the permittee shall submit to EPD an annual certification in June of each year certifying whether or not there has been any change in processes or wastewater characteristics as described in the submitted NPDES permit application that required notification in paragraph a., b., or d. of this condition. The permittee shall also certify annually in June whether the facility hasreceived offsite wastes or wastewater and detail any such occurrences.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with, or will be unable to comply with any effluent limitation specified in this permit, the permittee shall provide EPD and the owner of the receiving POTW with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

a. A description of the discharge and cause of noncompliance; and

b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

3. Facility Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

a. Any diversion from or bypass of pretreatment facilities covered by this permit is prohibited, except where unavoidable to prevent personal injury, loss of life, or severe property damage. The permittee shall operate the pretreatment works to minimize discharge of the pollutants listed in this permit from overflows or bypasses. The permittee shall monitor all overflows, bypasses, or spills. EPD and the owner of the receiving POTW shall be notified, in advance if possible, of any overflows, bypasses or spills. A record of each overflow bypass and spill shall be kept with information on the location, cause, duration, a peak flow rate. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing overflows, bypasses or spills.

b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to EPD and the owner of the receiving POTW at least 10 days (if possible) before the date of the bypass. The permittee shall submit notice of any unanticipated bypass with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

1. A description of the discharge and cause of noncompliance; and

2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

6. Sludge Disposal Requirements

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State or creating an adverse impact on the environment. Handling and disposal of such substances shall be in accordance with all applicable State and Federal regulations. Records must be maintained of the quantity (volume and concentration or mass) of such substances; the method of disposal; the location or site; and the date and time of disposal.

Sludge shall be disposed of in accordance with the regulations and guidelines established by EPD, the Federal Clean Water Act, and the Resource Conservation and Recovery Act (RCRA). Prior to disposal of sludge by any method other than co-disposal in a permitted sanitary landfill, the permittee shall submit a sludge management plan to EPD for written

approval. For land application of nonhazardous sludge, the permittee shall comply with the applicable criteria outlined in the most current version of EPD's "Guidelines for Land Application of Sewage Sludge (Biosolids) at Agronomic Rates" and with the State Rules, Chapter 391-3-6-.17. EPD may require more stringent control of this activity. Prior to land applying nonhazardous sludge, the permittee shall submit a sludge management plan to EPD for review and approval. Upon approval, the plan for land application will become a part of the NPDES permit upon modification of the permit.

7. Sludge Monitoring Requirements

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor the volume and concentration of solids removed from the plant. Records shall be maintained which document the quantity of solids removed from the plant. The ultimate disposal of solids shall be reported (in the unit of lbs) to EPD as specified in Part I.D of this permit.

8. Power Failures

Upon the reduction, loss, or failure of the primary source of power to said water pollution control facilities, the permittee shall use an alternative source of power if available to reduce or otherwise control production and/or all discharges in order to maintain compliance with the effluent limitations and prohibitions of this permit.

If such alternative power source is not in existence, and no date for its implementation appears in Part I, the permittee shall halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

9. Operator Certification Requirements

The permittee shall, when required, have a certified operator in charge of the facility in accordance with Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant operators And Laboratory Analysts Rule 43-51-6.(b).

10. Laboratory Analyst Certification Requirements

The permittee shall ensure that, when required, the person in responsible charge of the laboratory performing the analyses for determining permit compliance is certified in accordance with the Georgia Certification of Water and Wastewater Treatment Plant operators and Laboratory Analysts Act, as amended, and the Rules promulgated thereunder.

B. Responsibilities

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

a. To enter upon the permittee's premises where a discharge source is located or in which any records are required to be kept under the terms and conditions of this permit; and

b. At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and to sample any substance or parameters in any location.

2. Transfer of Ownership or Control

A permit may be transferred to another person by a permittee if:

a. The permittee notifies the Director of EPD and the owner of the receiving POTW in writing of the proposed transfer at least thirty (30) days in advance of the proposed transfer;

b. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director at least thirty (30) days in advance of the proposed transfer; and

c. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of EPD’s intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

3. Availability of Reports

Except for data deemed to be confidential under O.C.G.A. § 12-5-26 or by the Regional Administrator of the EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at an office of EPD. Effluent data, permit applications, permittee's names and addresses, and permits shall not be considered confidential.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or

d. To comply with any applicable effluent limitation issued pursuant to the order of the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120(D.D.C. 1976), if the effluent limitation so issued:

1. is different in conditions or more stringent than any effluent limitation in the permit; or

2. controls any pollutant not limited in the permit.

5. Toxic Pollutants

Notwithstanding Part II B.8 below, if a toxic discharge standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge, and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic discharge standard or prohibition and the permittee so notified.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Clean Water Act.

8. Local Ordinances

Nothing in this permit shall be construed to relieve the permittee from the responsibility of compliance with any local ordinance whose requirements are more stringent than those contained in this permit.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

The permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by EPD at least 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by an action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Management Practices

The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage, in-plant transfer, process and material handling, loading and unloading operations, plant site runoff, and sludge and waste disposal.

14. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

15. Duty to Provide Information

a. The permittee shall furnish to the EPD Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request copies of records required to be kept by this permit.

b. When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts and information.

16. Duty to Comply

a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) and is grounds for enforcement action; for permit termination; revocation and reissuance, or modification; or for denial of a permit renewal application. Any instances of noncompliance must be reported to EPD as specified in Part I.D and Part II.A of this permit.

b. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et. seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Georgia Water Quality Control Act (Act) also provides procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director**.**

17. Upset Provisions

Provisions of 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

PART III

A. Previous Permits

1. All previous State waste water permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

B. Schedule of Compliance

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: N/A

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

C. Special Conditions

1. The permittee shall not discharge substances in amounts, concentrations or combinations thereof which:

a. interfere with the operation of the City of Riceboro Waste Pollution Control Plant**;**

b. cause pass-through of pollutants in violation of the effluent limitations specified in National Pollutant Discharge Elimination System Permit No. GA0038491;

c. cause municipal sludge contamination; or

d. cause pass-through of pollutants that result in toxicity in aquatic life in the receiving stream.

2. Slug Discharges

a. Slug discharge shall be defined as any discharge of a non-routine, episodic nature including, but not limited to an accidental spill or a non-customary batch discharge.

b. The permittee shall notify the EPD and the owner of the receiving POTW immediately of any discharge or discharges including slug discharges that could result in operational problems at the POTW.

c. Upon notification from the EPD, the permittee shall develop and implement a plan to control slug discharges in accordance with the requirements of 40 CFR Part 403.8.

3. If sampling performed by the permittee indicates a violation, the permittee shall immediately notify the EPD Compliance Office within twenty-four (24) hours of becoming aware of the violation. For continuous dischargers, the permittee shall also immediately, within 24 hours, repeat the sampling and analysis of all of the constituents that may have contributed to the violation. For intermittent dischargers, repeat sampling and analysis should be conducted on the subsequent discharge. The sampling results shall be submitted to the EPD Compliance Office within 30 days after becoming aware of the violation.

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

The Georgia Environmental Protection Division proposes to issue a Pretreatment permit to the applicant identified below. The draft permit places conditions on the discharge of pollutants from the wastewater treatment plant to waters of the State.

Technical Contact: Whitney Fenwick (Whitney.Fenwick@dnr.ga.gov)
470-607-3078

Draft permit:

- ☐ first issuance
- ☐ reissuance with no or minor modifications from previous permit
- ☒ reissuance with substantial modifications from previous permit
- ☐ modification of existing permit

1. FACILITY INFORMATION

1.1 Pretreatment Permit No.: GAP050246

1.2 Name and Address of Owner/Applicant

SNF Holding Company
P.O. Box 250
Riceboro, Georgia, 31323
Liberty County

1.3 Name and Address of Facility

SNF Holding Company
1 Chemical Plant Road
Riceboro, Georgia, 31323
Liberty County

1.4 Facility Information

a. Average Flow: 55,000 GPD

b. Categorical (Y/N): Y

c. Production Based (Y/N): N

d. Max Flow: 70,000 GPD[1]

e. Significant Industrial User (Y/N): Y

f. Production Capacity: N/A

[1] SNF Holding Company has requested an increase to 100,000 GPD of their maximum allowable flow to meet planned growth.

1.5 SIC Code & Description:

2869 – Organic Polymer Production facility
2899 – Chemicals Not Else Classified

1.6 Description of Industrial Processes

SNF Holding Company is an organic polymer production facility that primarily produces polymers used in water/wastewater treatment and enhanced oil recovery**.**

1.7 Description of the Industrial Wastewater Treatment Facility

The Industrial Wastewater Treatment Facility currently consists of a "Wash Water System" and a sequencing batch reactor (SBR) system". The "Wash Water System" is a chemical treatment and evaporator/condenser treatment system which recycles a portion of the condensate back into the emulsion plants. SNF Holding Company proposes update its treatment systems, which may include new dissolved air flotation (DAF) equipment and additional treatment tanks for solids removal.

Production "Wash water" and process wasetewater from other portions of the site are currently received in 150,000 gallon storage tank or the proposed additional treatment tanks. The 150,000 gallon storage tank acts as an equalization tank for the process wash water. Wash water is transferred from this tank to either a 12,000 gallon evaporator feed tank or a 70,000 gallon cone bottom tank, dependent on treatment requirements. The 12,000 gallon evaporator feed tank includes bag filters to remove larger solids. The wash water from the evaporator feed tank is sent through the evaporator/condenser system where solids are removed and transferred offsite for disposal. The remaining condensate is pumped into a 140,000 gallon holding tank where a portion is recycled back into the emulsion plant. The remaining condensate is pumped in a 36,000 gallon wastewater equalization tankto undergo biological treatment. The 70,000 gallon cone bottom tank is used for solids separation, which is accomplished by adding caustic and/or acid to break the emulsions and allow solids to separate. The solids are removed from the cone bottom tank and sent to a contained holding area to be removed and transferred offsite for disposal. The remaining water from the cone bottom tank is transferred to a 135,000 gallon holding tank where the pH is adjusted and the contents aerated to accomplish nutrient removal. From this holding tank, wastewater is pumped through another pH adjustment tank to reduce pH levels and transferred to the biological system.

The proposed system upgrades to the biological system may include the addition of a primary DAF and equipment upgrades that increase the treatment capacity by increasing the reaction time, mixed liquor, or retention time.

The treated process wastewater is transferred to a post equalization tank. Sanitary wastewater is combined with the treated process wastewater in the post equalization tank. The post equalization tank flows directly into the City of Riceboro POTW.

1.8 Type of Wastewater Discharge

☒ process wastewater ☐ stormwater

☒ domestic wastewater ☒ combined (describe)

☐ other (description)

The total discharge is combined process wastewater and sanitary waste water; however the process wastewater stream will be sampled prior to entering the final post equalization tank and comingling with the sanitary wastewater.

1.9 Name and Address of Receiving POTW

City of Riceboro Water Pollution Control Plant (WPCP)
739 Barrington Ferry Road
Riceboro, Georgia 31323
Liberty County

1.10 Location and Description of the discharge (as reported by applicant)

Outfall #	Receiving POTW	Receiving POTW Permit No.	Max Receiving POTW Permitted Flow	River Basin
001	City of Riceboro	GA0038491	0.44 MGD	Ogeechee

1.11 Receiving POTW Design Capacity: 0.35 MGD

1.12 Description of the POTW Wastewater Treatment

The treatment process consists of screening followed by an aerated pond. Treated effluent from the pond can be either directed to the storage pond or to the sprayfields. The land treatment system (sprayfield) is equipped with an underdrain system. Treated effluent and groundwater from the underdrain system, discharges to an unnamed tributary of Riceboro Creek.

1.13 Characterization of Effluent Discharge as Reported by Applicant

The table below indicates all pollutants of concern believed present in the facility's wastewater effluent.

Outfall No. 001 – Treated Process Wastewater

Effluent Characteristics (as Reported by Applicant)	Maximum Daily Value	Average Monthly Value
Flow (MGD)	0.07	0.055
BOD_5 (mg/L)	20	Not Provided
TSS (mg/L)	96	Not Provided
Oil & Grease (mg/L)	15	Not Provided
TKN (lbs/day)	11.9	4.9
Chromium (mg/L)	0.1278	0.060
Copper (mg/L)	0.3988	0.1957
Nickel (mg/L)	0.0823	0.047
Zinc (mg/L)	0.7962	0.55
Cyanide (mg/L)	0.0330	0.025
Chloroform (lbs/day)	0.00271	0.00074
Methyl Chloride (lbs/day)	0.00540	0.00135
pH (s.u.)	7.1 – 8.34	7.1 – 8.34

2. APPLICABLE REGULATIONS

2.1 Local Regulations

Riceboro, GA Code of Ordinances Sec.40-264 (Sewer Use Ordinance)
See Appendix A for Sewer Use Ordinance

2.2 State Regulations

Chapter 391-3-6 of the Georgia Rules and Regulations for Water Quality Control

2.3 Federal Regulations

Source	Activity	Applicable Regulation
Industrial	Pretreatment	40 CFR 403
	Process Water Discharges	40 CFR 122 40 CFR 125 40 CFR 414

2.4 Industrial Effluent Limit Guideline(s)

Code of Federal Regulations, 40 CFR Part 403.
Code of Federal Regulations, 40 CFR Part 414.65 Subpart F[1]
Code of Federal Regulations, 40 CFR Part 414.85 Subpart H[2]
Code of Federal Regulations, 40 CFR Part 414.111 Subpart K

1 Subpart F – Commodity Organic Chemicals is applicable due to the intermediate manufacturing of methanol.
2 Subpart H – Specialty Organic Chemicals is applicable due to the manufacturing of acrylamide.

See Appendix B for Applicable Federal Regulations

3. EFFLUENT LIMITS AND PERMIT CONDITIONS

3.1 Permit Development

"The national pretreatment program objectives are achieved by applying and enforcing three types of pretreatment standards:"

- General and specific prohibitions
- Categorical pretreatment standards
- Local limits

"All three types of standards can be enforced by EPA, the state, and local government, even though they are developed at different levels of government (i.e., federal, state, and local). Pretreatment standards and requirements can be expressed as numeric limits, narrative prohibitions, and best management practices."

"The control authority is responsible for identifying standard(s) applicable to each IU and applying the most stringent requirements where multiple provisions exist." EPA Guidance - *Applicability of Pretreatment Standards and Requirements* (https://www.epa.gov/npdes/pretreatment-standards-and-requirements)

"Local limits are developed for pollutants (e.g. metals, cyanide, BOD_5, TSS, oil and grease, organics) that may cause interference, pass through, sludge contamination, and/or worker health and safety problems if discharged in excess of the receiving POTW treatment plant's capabilities and/or receiving water quality standards." EPA Guidance Document – *Introduction to the National Pretreatment Program, February 1999*

Local limit considerations can be broken down into several categories consisting of: sewer use ordinances, state level local limits, POTW NPDES limits, water quality standards, and POTW inhibition.

3.2 Conventional Pollutants

Pollutants of Concern	Basis
pH	Local Limit The City of Riceboro's Sewer Use Ordinance does not establish an allowable range for pH; however, EPD recommends the allowable range of 5.5 s.u to 9.0 s.u be retained from the previous permit.
	Categorical Limit There is no applicable federal categorical effluent limit.
5-Day Biochemical Oxygen Demand	Local Limit The City of Riceboro's Sewer Use Ordinance does not establish effluent limitations for BOD_5. The previous permit included mass-based limits which were calculated using the facility's flow limit of 0.07 MGD and concentrations of 250 mg/L daily average 350 mg/L daily maximum. Based on the increased flow to 0.1 MGD, new mass-based limits of 209 lbs/day daily average 292 lbs/day daily maximum have been included in this permit. A letter from Mayor Joseph Harris dated September 22, 2020 (See Appendix D) indicates that the City of Riceboro concurs with the inclusion of these limits.
	Categorical Limit There is no applicable federal categorical effluent limit.
Total Suspended Solids	Local Limit The City of Riceboro's Sewer Use Ordinance does not establish effluent limitations for TSS. The previous permit included mass-based limits which were calculated using the facility's flow limit of 0.07 MGD and concentrations of 250 mg/L daily average 350 mg/L daily maximum. Based on the increased flow to 0.1 MGD, new mass-based limits of 209 lbs/day daily average 292 lbs/day daily maximum have been included in this permit. A letter from Mayor Joseph Harris dated September 22, 2020 (See Appendix D) indicates that the City of Riceboro concurs with the inclusion of these limits.
	Categorical Limit There is no applicable federal categorical effluent limit.

Oil & Grease	Local Limit The City of Riceboro Sewer Use Ordinance establishes a maximum allowable limit of 100 mg/L for oil & grease. The previous permit included mass-based limits which were calculated using the facility's flow limit of 0.07 MGD and concentrations of 50 mg/L daily average 100 mg/L daily maximum. Oil & grease is more appropriately limited by concentration, hence EPD has removed the mass-based effluent limits for oil & grease and included concentration based limits of 50 mg/L daily average and 100 mg/L daily maximum. Categorical Limit There is no applicable federally based categorical limit.

3.3 Nonconventional Pollutants

Pollutants of Concern	Basis
Total Kjeldahl Nitrogen	Local Limit The City of Riceboro Sewer Use Ordinance does not establish effluent limits for TKN; however, due to an increase in production of emulsion polymers the discharge of nitrogen has increased. As a result of these production changes, SNF Holding Company has requested their TKN effluent limits be increased from the daily average of 15 lbs/day and daily maximum of 29 lbs/day to a daily average of 33 lbs/day and daily maximum of 58 lbs/day. In addition to this request, Rindt-McDuff Associates, Inc. on behalf of SNF Holding Company conducted a fate of nitrogen study in the City of Riceboro Wastewater Treatment Facility (See Appendix C) to evaluate the impacts of an increased total nitrogen loading. A letter from Mayor Joseph Harris dated September 22, 2020 (See Appendix D) indicates that the City of Riceboro concurs that it can accept the wastewater from SNF Holding Company so long as effluent limits of 33 lbs/day daily average and 58 lbs/day daily maximum are included. Categorical Limit There is no applicable federally based categorical limit.

3.4 Toxics & Manmade Organic Compounds (126 priority pollutants and metals)

Pollutants of Concern	Basis
Acenaphthene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for acenaphthene.
	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, acenaphthene shall have a daily average of 19 µg/L and daily maximum of 47 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.016 lbs/day and a daily maximum of 0.039 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Anthracene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total anthracene.
	Categorical Limit Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve discharges in accordance with §414.111." Per 40 CFR 414.111, anthracene shall have a daily average of 19 µg/L and daily maximum of 47 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.016 lbs/day and a daily maximum of 0.039 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Arsenic, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total arsenic. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.010 lbs/day daily average and 0.010 lbs/day daily maximum for total arsenic have been included in the permit.
	Categorical Limit There is no applicable federally based categorical limit.
Benzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for benzene.
	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, benzene shall have a daily average of 57 µg/L and daily maximum of 134 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.048 lbs/day and a daily maximum of 0.112 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Bis(2-ethylhexyl) phthalate	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for bis (2-ethylhexyl) phthalate. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, bis(2-ethylhexyl) phthalate shall have a daily average of 95 µg/L and daily maximum of 258 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.079 lbs/day and a daily maximum of 0.215 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Cadmium, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total cadmium. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.012 lbs/day daily average and 0.012 lbs/day daily maximum for total cadmium have been included in the permit. Categorical Limit. There is no applicable federally based categorical limit.
Chromium, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total chromium. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.389 lbs/day daily average and 0.389 lbs/day daily maximum for total chromium have been included in the permit. Categorical Limit. There is no applicable federally based categorical limit.

Copper, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total copper. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.557 lbs/day daily average and 0.557 lbs/day daily maximum for total copper have been included in the permit.
	Categorical Limit. There is no applicable federally based categorical limit.
Carbon Tetrachloride	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for carbon tetrachloride.
	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, carbon tetrachloride shall have a daily average of 142 µg/L and daily maximum of 380 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.118 lbs/day and a daily maximum of 0.317 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Chlorobenzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for chlorobenzene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, chlorobenzene shall have a daily average of 142 µg/L and daily maximum of 380 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.118 lbs/day and a daily maximum of 0.317 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Chloroethane	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for chloroethane. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, chloroethane shall have a daily average of 110 µg/L and daily maximum of 295 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.092 lbs/day and a daily maximum of 0.246 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Chloroform	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for chloroform. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, chloroform shall have a daily average of 111 µg/L and daily maximum of 325 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.093 lbs/day and a daily maximum of 0.271 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Cyanide, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total cyanide. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.068 lbs/day daily average and 0.068 lbs/day daily maximum for total cyanide have been included in the permit. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, total cyanide shall have a daily average of 420 µg/L and daily maximum of 1,200 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.350 lbs/day and a daily maximum of 1.00 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream. A direct source of cyanide bearing waste streams could not be identified, therefore the assumption was made that the entire process line contributes to the source of cyanide; hence the total process flow was used to calculated the mass-based limit.

Di-n-butyl phthalate	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for di-n-butyl phthalate. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, di-n-butyl phthalate shall have a daily average of 20 µg/L and daily maximum of 43 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.017 lbs/day and a daily maximum of 0.036 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
1,2-Dichlorobenzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,2-dichlorobenzene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,2-dichlorobenzene shall have a daily average of 196 µg/L and daily maximum of 794 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.163 lbs/day and a daily maximum of 0.662 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

1,3-Dichlorobenzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,3-dichlorobenzene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,3-dichlorobenzene shall have a daily average of 142 µg/L and daily maximum of 380 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.118 lbs/day and a daily maximum of 0.317 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
1,4-Dichlorobenzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,4-dichlorobenzene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,4-dichlorobenzene shall have a daily average of 142 µg/L and daily maximum of 380 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.118 lbs/day and a daily maximum of 0.317 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,1-dichloroethane.
1,1-Dichloroethane	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,1-dichloroethane shall have a daily average of 22 µg/L and daily maximum of 59 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.018 lbs/day and a daily maximum of 0.049 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,2-dichloroethane.
1,2-Dichloroethane	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,2-dichloroethane shall have a daily average of 180 µg/L and daily maximum of 574 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.150 lbs/day and a daily maximum of 0.479 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,1-dichloroethylene.
1,1- Dichloroethylene	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,1-dichloroethylene shall have a daily average of 22 µg/L and daily maximum of 60 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.018 lbs/day and a daily maximum of 0.050 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,2-trans-dichloroethylene.
1,2-trans- Dichloroethylene	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,2-trans-dichloroethylene shall have a daily average of 25 µg/L and daily maximum of 66 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.021 lbs/day and a daily maximum of 0.055 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

1,2-Dichloropropane	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,2-dichloropropoane. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,2-dichloropropane shall have a daily average of 196 µg/L and daily maximum of 794 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.163 lbs/day and a daily maximum of 0.662 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
1,3-Dichloropropylene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,3-dichloropropylene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,3-dichloropropylene shall have a daily average of 196 µg/L and daily maximum of 794 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.163 lbs/day and a daily maximum of 0.662 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Diethyl phthalate	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for diethyl phthalate. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, diethyl phthalate shall have a daily average of 46 µg/L and daily maximum of 113 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.038 lbs/day and a daily maximum of 0.094 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Dimethyl phthalate	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for dimethyl phthalate. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, dimethyl phthalate shall have a daily average of 19 µg/L and daily maximum of 47 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.016 lbs/day and a daily maximum of 0.039 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 4,6-dinitro-o-cresol.
4,6- Dinitro-o-cresol	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 4,6-dinitro-o-cresol shall have a daily average of 78 µg/L and daily maximum of 277 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.065 lbs/day and a daily maximum of 0.231 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for ethylbenzene.
Ethylbenzene	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, ethylbenzene shall have a daily average of 142 µg/L and daily maximum of 380 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.118 lbs/day and a daily maximum of 0.317 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Fluroanthene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for fluroanthene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, fluroanthene shall have a daily average of 22 µg/L and daily maximum of 54 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.018 lbs/day and a daily maximum of 0.045 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Fluorene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for fluorene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, fluorene shall have a daily average of 19 µg/L and daily maximum of 47 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.016 lbs/day and a daily maximum of 0.039 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Hexachlorobenzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for hexachlorobenzene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, hexachlorobenzene shall have a daily average of 196 µg/L and daily maximum of 794 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.163 lbs/day and a daily maximum of 0.662 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Hexachlorobutadiene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for hexachlorobutadiene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, hexachlorobutadiene shall have a daily average of 142 µg/L and daily maximum of 380 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.118 lbs/day and a daily maximum of 0.317 lbs/day. T The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Hexachloroethane	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for hexachloroethane. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, hexachloroethane shall have a daily average of 196 µg/L and daily maximum of 794 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.163 lbs/day and a daily maximum of 0.662 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Lead, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total lead. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.086 lbs/day daily average and 0.086 lbs/day daily maximum for total lead have been included in the permit. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, total lead shall have a daily average of 320 µg/L and daily maximum of 690 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.267 lbs/day and a daily maximum of 0.575 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream. A direct source of lead bearing wastestreams could not be identified, therefore the assumption was made that the entire process line contributes to the source of total lead; hence the total process flow was used to calculate the mass-based limit.

Mercury, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total mercury. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.004 lbs/day daily average and 0.004 lbs/day daily maximum for total mercury have been included in the permit.
	Categorical Limit. There is no applicable federally based categorical limit.
Methyl Chloride	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for methyl chloride.
	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, methyl chloride shall have a daily average of 110 µg/L and daily maximum of 295 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.092 lbs/day and a daily maximum of 0.246 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Methylene Chloride	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for methylene chloride. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, methylene chloride shall have a daily average of 36 µg/L and daily maximum of 170 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.030 lbs/day and a daily maximum of 0.142 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Molybdenum, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total molybdenum. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.009 lbs/day daily average and 0.009 lbs/day daily maximum for total molybdenum have been included in the permit. Categorical Limit. There is no applicable federally based categorical limit.

	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for naphthalene.
Naphthalene	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, naphthalene shall have a daily average of 19 µg/L and daily maximum of 47 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.016 lbs/day and a daily maximum of 0.039 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Nickel, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total nickel. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.054 lbs/day daily average and 0.054 lbs/day daily maximum for total nickel have been included in the permit.
	Categorical Limit. There is no applicable federally based categorical limit.

Nitrobenzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for nitrobenzene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, nitrobenzene shall have a daily average of 2,237 µg/L and daily maximum of 6,402 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 1.866 lbs/day and a daily maximum of 5.339 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
2-Nitrophenol	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 2-nitropehnol. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 2-nitrophenol shall have a daily average of 65 µg/L and daily maximum of 231 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.054 lbs/day and a daily maximum of 0.193 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

4-Nitrophenol	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 4-nitropehnol. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 4-nitrophenol shall have a daily average of 162 µg/L and daily maximum of 576 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.135 lbs/day and a daily maximum of 0.480 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Phenanthrene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for phenanthrene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, phenanthrene shall have a daily average of 19 µg/L and daily maximum of 47 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.016 lbs/day and a daily maximum of 0.039 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Pyrene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for pyrene.
	Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, pyrene shall have a daily average of 20 µg/L and daily maximum of 48 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.017 lbs/day and a daily maximum of 0.040 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Selenium, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total selenium. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.013 lbs/day daily average and 0.013 lbs/day daily maximum for total selenium have been included in the permit.
	Categorical Limit. There is no applicable federally based categorical limit.
Silver, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total silver. Due to the increase in permitted flow to 0.1 MGD daily average and daily maximum, increased effluent limitations of daily 0.010 lbs/day daily average and 0.010 lbs/day daily maximum for total silver have been included in the permit.
	Categorical Limit. There is no applicable federally based categorical limit.

Tetrachloroethylene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for tetrachloroethylene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, tetrachloroethylene shall have a daily average of 52 µg/L and daily maximum of 164 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.043 lbs/day and a daily maximum of 0.137 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Toluene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for toluene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, toluene shall have a daily average of 28 µg/L and daily maximum of 74 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.023 lbs/day and a daily maximum of 0.062 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

1,2,4- Trichlorobenzene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,2,4-trichlorobenzene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,2,4-trichlorobenzene shall have a daily average of 196 µg/L and daily maximum of 794 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.163 lbs/day and a daily maximum of 0.662 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
1,1,1- Trichloroethane	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,1,1-trichloroethane. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,1,1-trichloroethane shall have a daily average of 22 µg/L and daily maximum of 59 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.018 lbs/day and a daily maximum of 0.049 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

1,1,2- Trichloroethane	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for 1,1,2- Trichloroethane. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, 1,1,2-trichloroethane shall have a daily average of 32 µg/L and daily maximum of 127 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.027 lbs/day and a daily maximum of 0.106 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Trichloroethylene	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for trichloroethylene. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, trichloroethylene shall have a daily average of 26 µg/L and daily maximum of 69 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.022 lbs/day and a daily maximum of 0.058 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

Vinyl Chloride	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for vinyl chloride. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, vinyl chloride shall have a daily average of 97 µg/L and daily maximum of 172 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.081 lbs/day and a daily maximum of 0.143 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.
Zinc, Total	Local Limit The City of Riceboro's Sewer Use Ordinance has not established effluent limits for total zinc. The previous effluent limit for total zinc was based on the production based categorical standard; hence the categorical limit discussed below will be applied. Categorical Limit SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 do not include numeric limitations; however they state "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111." Per 40 CFR 414.111, total zinc shall have a daily average of 1,050 µg/L and daily maximum of 2,610 µg/L. Per the requirements of 40 CFR 414.111, the effluent shall also not exceed the mass based daily average of 0.876 lbs/day and a daily maximum of 2.18 lbs/day. The mass-based limit was determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the permitted average flow for the process wastestream.

3.5 Comparison and Summary of Limits

The highlighted limits shown below indicate the most stringent allowable limits for the permit based on all pretreatment standards.

Pollutant	Categorical	SUO	Sludge Regulations[1]	POTW NPDES-Based Limit	WQS[2] (acute & chronic)	POTW[3] Inhibition	Other (BPJ & Previous Limit)
BOD_5	N/A	N/A	N/A	509 mg/L	N/A	N/A	209/292 lbs/day
TSS	N/A	N/A	N/A	1147 mg/L	N/A	N/A	209/292 lbs/day
Total Kjeldahl Nitrogen	N/A	N/A	N/A	N/A	N/A	N/A	33/58 lbs/day
Oil & Grease	N/A	100	N/A	N/A	N/A	N/A	50/100 mg/L
Acenaphthene	19/47 µg/L 0.016/0.039 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene	19/47 µg/L 0.016/0.039 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.010 lb/day
Benzene	57/134 µg/L 0.048/0.112 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Bis(2-ethylhexyl) phthalate	95/258 µg/L 0.079/0.215 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.012 lbs/day
Carbon Tetrachloride	142/380 µg/L 0.118/0.317 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	142/380 µg/L 0.118/0.317 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Chloroethane	110/295 µg/L 0.092/0.246 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Chloroform	111/325 µg/L 0.093/0.271 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Chromium, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.389 lbs/day

Pollutant	Categorical	SUO	Sludge Regulations[1]	POTW NPDES-Based Limit	WQS[2] (acute & chronic)	POTW[3] Inhibition	Other (BPJ & Previous Limit)
Copper, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.557 lbs/day
Cyanide, Total	420/1200 µg/L 0.350/1.00 lbs/day	N/A	N/A	N/A	N/A	N/A	0.068 lbs/day
Di-n-butyl phthalate	20/43 µg/L 0.017/0.036 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	196/794 µg/L 0.163/0.662 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	142/380 µg/L 0.118/0.317 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	142/380 µg/L 0.118/0.317 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,1-Dichloroethane	22/59 µg/L 0.018/0.049 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane	180/574 µg/L 0.150/0.479 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,1-Dichloroethylene	22/60 µg/L 0.018/0.050 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,2-trans-Dichloroethylene	25/66 µg/L 0.021/0.055 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloropropane	196/794 µg/L 0.163/0.662 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,3-Dichloropropylene	196/794 µg/L 0.163/0.662 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Diethyl phthalate	46/113 µg/L 0.038/0.094 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Dimethyl phthalate	19/47 µg/L 0.016/0.039 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
4,6-Dinitro-o-cresol	78/277 µg/L 0.065/0.231 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A

Pollutant	Categorical	SUO	Sludge Regulations[1]	POTW NPDES-Based Limit	WQS[2] (acute & chronic)	POTW[3] Inhibition	Other (BPJ & Previous Limit)
Ethylbenzene	142/380 µg/L 0.118/0.317 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Fluoranthene	22/54 µg/L 0.018/0.045 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Fluorene	19/47 µg/L 0.016/0.039 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Hexachlorobenzene	196/794 µg/L 0.163/0.662 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Hexa-chlorobutadiene	142/380 µg/L 0.118/0.317 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Hexachloroethane	196/794 µg/L 0.163/0.662 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Lead, Total	320/690 µg/L 0.267/0.575 lbs/day	N/A	N/A	N/A	N/A	N/A	0.086 lbs/day
Mercury, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.004 lbs/day
Methyl Chloride	110/295 µg/L 0.092/0.246 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Methylene Chloride	36/170 µg/L 0.030/0.142 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Molybdenum, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.009 lbs/day
Naphthalene	19/47 µg/L 0.016/0.039 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Nickel, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.054 lbs/day
Nitrobenzene	2237/6402 µg/L 1.87/5.34 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
2-Nitrophenol	65/231 µg/L 0.054/0.193 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A

Pollutant	Categorical	SUO	Sludge Regulations[1]	POTW NPDES-Based Limit	WQS[2] (acute & chronic)	POTW[3] Inhibition	Other (BPJ & Previous Limit)
4-Nitrophenol	162/576 µg/L 0.135/0.480 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Phenanthrene	19/47 µg/L 0.016/0.039 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	20/48 µg/L 0.017/0.040 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Selenium, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.013 lbs/day
Silver, Total	N/A	N/A	N/A	N/A	N/A	N/A	0.010 lbs/day
Tetrachloroethylene	52/164 µg/L 0.043/0.137 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	28/74 µg/L 0.023/0.062 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,2,4-Trichlorobenzene	196/794 µg/L 0.163/0.662 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,1,1-Trichloroethane	22/59 µg/L 0.018/0.049 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
1,1,2-Trichloroethane	32/127 µg/L 0.027/0.106 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Trichloroethylene	26/69 µg/L 0.022/0.058 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	97/172 µg/L 0.081/0.143 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	1050/2610 µg/L 0.876/2.18 lbs/day	N/A	N/A	N/A	N/A	N/A	N/A

[1] The City of Riceboro does not dispose of sludge; hence sludge criterion does not apply.
[2] The City of Riceboro utilizes a land treatment system equipped with underdrains.
[3] The City of Riceboro does not have activated sludge or nitrification inhibition.

3.6 Example Limit Calculations

An example calculation for each standard that required consideration has been included below. Complete results can be found in Appendix E – Effluent Limit Calculations.

3.6.a. Categorical Effluent Limit Guideline Calculations

SNF Holding Company is subject to 40 CFR 414.65 (Subpart F) and 414.85 (Subpart H), Pretreatment Standards for Existing Sources. 40 CFR 414.65 and 414.85 does not include numeric limitations; however it states "Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR 403 and achieve discharges in accordance with 40 CFR 414.111 (Subpart K, Indirect Point Source Discharges)."

In accordance with 40 CFR 414.110 (Subpart K), "The provisions of this subpart are applicable to the process wastewater discharges resulting from the manufacture of the OCPSF products and product groups defined by 40 CFR 414.111 from any indirect discharge point source.

Per 40 CFR 414.111(a), any point source subject to this subpart must achieve discharges not exceeding the quantity (mass) determined by multiplying the concentration limit provided in 40 CFR 414.111(b) by the process wastewater flow subject to this subpart. Based on this requirement a mass-based limit was calculated for each constituent. An example is shown below and additional calculations can be found in Appendix E.

Ethylbenzene

Daily Average = 142 µg/L
Daily Maximum = 380 µg/L
Process Flow (new flow limit): 100,000 (0.1 MGD)

Daily Average (lbs/day) = 0.142 mg/L x 8.34 x 0.1 (MGD)
Daily Average (lbs/day) = 0.118

Daily Maximum (lbs/day) = 0.380 mg/L x 8.34 x 0.1 (MGD)
Daily Maximum (lbs/day) = 0.317

3.6.b. State Local Limit Calculations – Not Applicable

3.6.c. NPDES Permit Limit Calculations

$$TSS\ AHL(\frac{lbs}{day}) = \frac{8.34 \times NPDES\ Limit\ (\frac{mg}{L}) \times POTW\ Flow(MGD)}{1 - \frac{POTW\ Removal\ Efficiency(\%)}{100}}$$

$$TSS\ AHL(\frac{lbs}{day}) = \frac{8.34 \times 45\ (\frac{mg}{L}) \times 0.35(MGD)}{1 - \frac{87.5\%}{100}}$$

$$TSS\ AHL\ (\frac{lbs}{day}) = 1{,}050$$

$$TSS\ Load\ (\frac{lbs}{day}) = AHL\ (\frac{lbs}{day}) \times (1 - \frac{Safety\ Factor(\%)}{100}) - Dom.|Com.\ Load\ (\frac{lbs}{day})$$

$$TSS\ Load\ (\frac{lbs}{day}) = 1{,}050\ (\frac{lbs}{day}) \times (1 - \frac{10\%}{100}) - 521\ (\frac{lbs}{day})$$

$$TSS\ Load\ (\frac{lbs}{day}) = 424.5$$

$$TSS\ Local\ Limit\ (\frac{mg}{L}) = \frac{Allowable\ Loading\ (\frac{lbs}{day})}{8.34 \times IU\ Pollutant\ Flow(MGD)}$$

$$TSS\ Local\ Limit\ (\frac{mg}{L}) = \frac{424.5\ (\frac{lbs}{day})}{8.34 \times 0.1(MGD)}$$

$$TSS\ Local\ Limit\ (\frac{mg}{L}) = 509$$ (Not Most Stringent Value)

3.6.d. Acute Water Quality Standard Calculations

The City of Riceboro utilizes a land treatment system equipped with underdrains with intermittent discharges; hence pass-through of WQS cannot be determined.

3.6.e. Chronic Water Quality Standard Calculations

The City of Riceboro utilizes a land treatment system equipped with underdrains with intermittent discharges; hence pass-through of WQS cannot be determined.

3.6.f. POTW Inhibition Calculations – Not Applicable

4.0 OTHER PERMIT REQUIREMENTS AND CONSIDERATIONS

4.1 Anti-Backsliding

The limits in this permit are in compliance with 40 C.F.R. 122.44(l). 40 C.F.R. 122.44(l)(2)(i)(B)(1) states, permit limits may be less stringent if "Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance."

a. The permittee has requested an increase in permitted flow based on current and projected growth. Based on the increase in flow rate, the mass-based limitations were adjusted.

b. In response to the requested increase nitrogen limit from SNF Holding Company, a fate of nitrogen study was conducted which brought new information regarding the impacts of nitrogen loading. Based on the results of the fate of nitrogen study. The results of the study show that the City of Riceboro can receive an increased nitrogen loading without impacting the operations of the land treatment system; hence the daily average of 15 lbs/day and daily maximum of 29 lbs/day for TKN have been increased to 30 lbs/day and 58 lbs/day, respectively.

c. The previous permit included mass-based effluent limits for oil & grease, which were translated from a concentration-based daily average of 50 mg/L and daily maximum of 100 mg/L into mass-based daily average of 29 lbs/day and 58 lbs/day. Oil & grease is more appropriately limited by concentration, hence EPD has removed the mass-based effluent limits for oil & grease and has replaced them with concentration limits of 50 mg/L daily average and 100 mg/L daily maximum.

5.0 REPORTING

The facility has been assigned to the following EPD office for reporting, compliance and enforcement.

Georgia Environmental Protection Division
Coastal District (Brunswick) Office
400 Commerce Center Drive
Brunswick, GA 31523

5.1 E-Reporting

The permittee is required to electronically submit documents in accordance with 40 CFR Part 127.

6.0 REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

Not applicable

7.0 PERMIT EXPIRATION

The permit will expire five years from the effective date.

8.0 PROCEDURES FOR THE FORMULATION OF FINAL DETERMINATIONS

8.1 Comment Period

The Georgia Environmental Protection Division (EPD) proposes to issue a permit to this applicant subject to the effluent limitations and special conditions outlined above. These determinations are tentative.

Georgia Environmental Protection Division
Wastewater Regulatory Program
2 Martin Luther King Jr. Drive
Suite 1152 East
Atlanta, Georgia 30334

The permit application, draft permit, and other information are available for review at 2 Martin Luther King Jr. Drive, Suite 1152 East, Atlanta, Georgia 30334, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For additional information, you can contact 404-463-1511.

8.2 Public Comments

Persons wishing to comment upon or object to the proposed determinations are invited to submit same in writing to the EPD address above, or via e-mail at *EPDcomments@dnr.ga.gov* within 30 days of the initiation of the public comment period. All comments received prior to that date will be considered in the formulation of final determinations regarding the application. The permit number should be placed on the top of the first page of comments to ensure that your comments will be forwarded to the appropriate staff.

8.3 Public Hearing

Any applicant, affected state or interstate agency, the Regional Administrator of the U.S. Environmental Protection Agency (EPA) or any other interested agency, person or group of persons may request a public hearing with respect to an NPDES permit application if such request is filed within thirty (30) days following the date of the public notice for such application. Such request must indicate the interest of the party filing the request, the reasons why a hearing is requested, and those specific portions of the application or other NPDES form or information to be considered at the public hearing.

The Director shall hold a hearing if he determines that there is sufficient public interest in holding such a hearing. If a public hearing is held, notice of same shall be provided at least thirty (30) days in advance of the hearing date.

In the event that a public hearing is held, both oral and written comments will be accepted; however, for the accuracy of the record, written comments are encouraged. The Director or a designee reserves the right to fix reasonable limits on the time allowed for oral statements and such other procedural requirements, as deemed appropriate.

Following a public hearing, the Director, unless it is decided to deny the permit, may make such modifications in the terms and conditions of the proposed permit as may be appropriate and shall issue the permit.

If no public hearing is held, and, after review of the written comments received, the Director determines that a permit should be issued and that the determinations as set forth in the proposed permit are substantially unchanged, the permit will be issued and will become final in the absence of a request for a contested hearing. Notice of issuance or denial will be made available to all interested persons and those persons that submitted written comments to the Director on the proposed permit.

If no public hearing is held, but the Director determines, after a review of the written comments received, that a permit should be issued but that substantial changes in the proposed permit are warranted, public notice of the revised determinations will be given and written comments accepted in the same manner as the initial notice of application was given and written comments accepted pursuant to EPD Rules, Water Quality Control, subparagraph 391-3-6-.08(7)(b). The Director shall provide an opportunity for public hearing on the revised determinations. Such opportunity for public hearing and the issuance or denial of a permit thereafter shall be in accordance with the procedures as are set forth above.

8.4 Final Determination

At the time that any final permit decision is made, the Director shall issue a response to comments. The issued permit and responses to comments can be found at the following address:

http://epd.georgia.gov/watershed-protection-branch-permit-and-public-comments-clearinghouse-0

8.5 Contested Hearings

Any person who is aggrieved or adversely affected by the issuance or denial of a permit by the Director of EPD may petition the Director for a hearing if such petition is filed in the office of the Director within thirty (30) days from the date of notice of such permit issuance or denial. Such hearing shall be held in accordance with the EPD Rules, Water Quality Control, subparagraph 391-3-6-.01.

Petitions for a contested hearing must include the following:

1. The name and address of the petitioner;
2. The grounds under which petitioner alleges to be aggrieved or adversely affected by the issuance or denial of a permit;
3. The reason or reasons why petitioner takes issue with the action of the Director;
4. All other matters asserted by petitioner which are relevant to the action in question.

APPENDIX A

Riceboro, GA Code of Ordinances Sec. 40-264

Sec. 40-264. - Prohibited discharges.

The following described substances, materials, waters, or waste shall be limited in discharge to municipal systems to concentrations or quantities which will not harm either the sewers, wastewater treatment process or equipment, will not have an adverse effect on the receiving stream, or will not otherwise endanger lives, limb, public property, or constitute a nuisance. The limitations or restrictions on materials or characteristics of waste or wastewater discharged to the sanitary sewer which shall not be violated without approval of the city are as follows:

(1) Wastewater having a temperature higher than 150 degrees Fahrenheit (65 degrees Celsius) or wastewater which will elevate the temperature of the influent to the publicly owned treatment works (POTW) to 104 degrees Fahrenheit (40 degrees Celsius) or higher.

(2) Wastewater containing more than 25 milligrams per liter of petroleum oil, non-biodegradable cutting oils, or product of mineral oil origin.

(3) Wastewater containing more than 100 milligrams per liter of oils, fat, grease or wax, whether emulsified or not, or containing substances which may solidify or become viscous at temperatures between 32 degrees (0 degrees Celsius) and 150 degrees Fahrenheit (65 degrees Celsius).

(4) Any garbage that has not been properly shredded. Garbage grinders may be connected to sanitary sewers from homes, hotels, institutions, restaurants, hospitals, catering establishments, or similar places where garbage originates from the preparation of food in kitchens for the purpose of consumption on the premises or when served by caterers.

(5) All industrial discharges to the city sewer system must comply with the federal industrial pretreatment standards (40 CFR 403) and those industrial pretreatment standards developed by the state environmental protection division.

(6) Any waters or wastes containing taste or odor producing substances exceeding limits which may be established by the city.

(7) Any radioactive wastes or isotopes of such half-life or concentrations as may exceed limits established in compliance with applicable state or federal regulations.

(8) Quantities of flow, concentrations, or both which constitute a "slug."

(9) Waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

(Ord. of 10-6-2009, § 6.5)

APPENDIX B

Federal Regulations

40 CFR 414 Subpart F
40 CFR 414 Subpart H
40 CFR 414 Subpart K

ELECTRONIC CODE OF FEDERAL REGULATIONS

e-CFR data is current as of June 14, 2017

Title 40: Protection of Environment
PART 414–ORGANIC CHEMICALS, PLASTICS, AND SYNTHETIC FIBERS
Subpart K–Indirect Discharge Point Sources

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§414.111 Toxic pollutant standards for indirect discharge point sources.

(a) Any point source subject to this subpart must achieve discharges not exceeding the quantity (mass) determined by multiplying the process wastewater flow subject to this subpart times the concentration listed in the following table.

(b) In the case of lead, zinc, and total cyanide the discharge quantity (mass) shall be determined by multiplying the concentrations listed in the following table for these pollutants times the flow from metal-bearing waste streams for metals and times the flow from the cyanide-bearing waste streams for total cyanide. The metal-bearing waste streams and cyanide-bearing waste streams are defined as those waste streams listed in Appendix A of this part, plus any additional OCPSF process wastewater streams identified by the control authority on a case-by-case basis as metal or cyanide bearing based upon a determination that such streams contain significant amounts of the pollutants identified above. Any such streams designated as metal or cyanide bearing must be treated independently of other metal or cyanide bearing waste streams unless the control authority determines that the combination of such streams, prior to treatment, with the Appendix A waste streams will result in substantial reduction of these pollutants. This determination must be based upon a review of relevant engineering, production, and sampling and analysis information.

	PSES and PSNS[1]	
Effluent characteristics	**Maximum for any one day**	**Maximum for any monthly average**
Acenaphthene	47	19
Anthracene	47	19
Benzene	134	57
Bis(2-ethylhexyl) phthalate	258	95
Carbon Tetrachloride	380	142
Chlorobenzene	380	142
Chloroethane	295	110
Chloroform	325	111
Di-n-butyl phthalate	43	20
1,2-Dichlorobenzene	794	196
1,3-Dichlorobenzene	380	142
1,4-Dichlorobenzene	380	142
1,1-Dichloroethane	59	22
1,2-Dichloroethane	574	180
1,1-Dichloroethylene	60	22
1,2-trans-Dichloroethylene	66	25
1,2-Dichloropropane	794	196
1,3-Dichloropropylene	794	196
Diethyl phthalate	113	46
Dimethyl phthalate	47	19
4,6-Dinitro-o-cresol	277	78
Ethylbenzene	380	142
Fluoranthene	54	22
Fluorene	47	19
Hexachlorobenzene	794	196
Hexachlorobutadiene	380	142
Hexachloroethane	794	196
Methyl Chloride	295	110
Methylene Chloride	170	36
Naphthalene	47	19
Nitrobenzene	6,402	2,237
2-Nitrophenol	231	65
4-Nitrophenol	576	162
Phenanthrene	47	19

Pyrene	48	20
Tetrachloroethylene	164	52
Toluene	74	28
Total Cyanide	1,200	420
Total Lead	690	320
Total Zinc[2]	2,610	1,050
1,2,4-Trichlorobenzene	794	196
1,1,1-Trichloroethane	59	22
1,1,2-Trichloroethane	127	32
Trichloroethylene	69	26
Vinyl Chloride	172	97

[1]All units are micrograms per liter.

[2]Total Zinc for Rayon Fiber Manufacture that uses the viscose process and Acrylic Fiber Manufacture that uses the zinc chloride/solvent process is 6,796 µg/l and 3,325 µg/l for maximum for any one day and maximum for monthly average, respectively.

APPENDIX C

Fate of Nitrogen in Riceboro Wastewater Treatment Facility (2015)

5 IPP REQUEST

The following chapter summarizes the request for an increase in flow and loading in the SNF IPP. Also included below are recommended provisions that address ongoing nitrogen testing at the POTW to monitor any potential impact of these these proposed limits.

As a result of changes in the product mix at the SNF plant and with anticipated plant growth, SNF is in need of an increase in permit limits for TKN, BOD_5, total suspended solids (TSS) and flow. To meet current and projected plant growth, the following IPP limits are requested:

TABLE 2 – PROPOSED LIMITS

PARAMETER	DAILY MAXIMUM (lbs/day, except flow)	MONTHLY AVERAGE (lbs/day, except flow)	MONTHLY AVERAGE CONCENTRATION AT 100,000 GPD (mg/L)
FLOW (MGD)	100,000	100,000	-
BOD_5	292	209	250
TSS	292	209	250
Oil and Grease	83	42	50
TKN	58	33	40

5.1 Basis for Request

In addition to the proposed pretreatment system upgrade, the City of Riceboro has increased the capacity of the POTW from 100,000 gpd to 350,000 gpd. As discussed in Section 4.2, a nitrogen study was conducted in January and February 2015. The results of the study were summarized in a report dated April 2015.

CITY OF RICEBORO

P.O. Box 269 • 4614 S. Coastal Highway
Riceboro, Georgia 31323
Phone (912) 884-2986 • Fax (912) 884-2988

March 3, 2016

Mr. Brent Hanson
Environmental & Safety Manager
SNF Holding Company, Inc.
P.O. Box 250
Riceboro, GA 31323

Re: Requested Modifications
SNF Industrial Pretreatment Permit (GAP050246)

Dear Mr. Hanson:

Our engineering consulting firm, P.C. Simonton & Associates, Inc., has reviewed the various data associated with the request by SNF Holding Company, Inc. to amend its Pretreatment Permit to increase the flow and the TKN. Obviously, any permit increase by SNF has the potential to impact the City's wastewater treatment system. Fortunately, the City has already increased the capacity of the Riceboro wastewater treatment system in anticipation of the future growth needs of the City and at the SNF plant. It is our engineer's opinion that the recent expansion will allow us to treat a more concentrated influent from SNF, at least until the flow at the plant approaches the new capacity. In order to fully protect the City's wastewater treatment system we have included a monitoring plan, to which all parties have agreed, to test and evaluate groundwater nitrogen levels on a quarterly basis. This monitoring program will include all measured parameters, but will specifically focus on nitrogen and nitrates in the groundwater. If nitrate levels reach a level of 3 mg/l in the downstream monitoring wells it will trigger an immediate action. That action will be to add treatment capabilities at the plant and initiate a mitigation plan to resolve any treatment problems at the plant as a direct result of this increased concentrations. This action would be taken by the City but would be at the expense of SNF Holding.

Based on my review of the various data provided by SNF and their consultants plus the plan for monitoring and future expansion/mitigation, the City concurs in the requested permit increase by SNF. Additionally, should the SNF wastewater discharge create operational problems at the City's treatment system, SNF has agreed to provide funding and fully cooperate with action necessary to alleviate the problems.

The discharge limits requested by SNF are shown below:

PARAMETER	DAILY MAXIMUM (lb/day except flow)	MONTHLY AVERAGE (lb/day except flow)	MONTHLY AVERAGE CONCENTRATTION AT 100,000 GPD (mg/l)
FLOW (MGD)	100,000	100,000	-
BOD_5	292	209	250
TSS	292	209	250
OIL AND GREASE	83	42	50
TKN	58	33	40

Please let me know if you have any questions.

Sincerely,

William T. Austin
Mayor, City of Riceboro

ESTABLISHING SITE SPECIFIC NITROGEN LIMITS

MEMO OF UNDERSTANDING
SUMMARY OF MEETING
CITY OF RICEBORO & SNF FLOQUIP

LOCATION:	SNF FLOQUIP
MEETING DATE:	January 8, 2015 10:00 AM
ATTENDEES:	Mayor Bill Austin, City of Riceboro
	Paul Simonton, P.E., P. C. Simonton & Associates, Inc.
	Marcus Sack, P.E., P. C. Simonton & Associates, Inc.
	Andy Hicks, City of Riceboro
	Brent Hanson, SNF Floquip
	Brian Rindt, P.E., Rindt-McDuff Associates, Inc.
	Bobby Hadden, Rindt-McDuff Associates, Inc.
	Russ St John, Complete Water Services, LLC

PURPOSE OF MEETING: Establish the framework and request approval from the City of Riceboro (City) for SNF Holding Company (SNF - Riceboro) to implement the proper protocol for establishing site specific nitrogen limits in the SNF industrial pretreatment permit (IPP).

BACKGROUND: Over the past few years production of emulsion polymers has increased substantially at the SNF – Riceboro facility. This increased production has caused a corresponding increase in nitrogen ((measured as Total Kjeldahl Nitrogen (TKN)) to the SNF pretreatment facility. As such, it has become more difficult for the existing pretreatment facility to maintain continuous compliance with the current TKN limits. SNF is currently evaluating options for system modification or upgrade directed at nitrogen removal.

Coinciding with the increase in production, during 2014 the production facility modified its emulsion reactor cleaning procedures by switching to a high-pressure, low water volume process. This process has reduced the amount of water for reactor cleaning by one-sixth of the previous cleaning method. However, due to the high viscosity, and high TKN, much of the resulting wastewater is currently being hauled off-site for solidification at substantial cost. SNF is currently investigating treatment options for reducing the viscosity and TKN.

As part of this evaluation process, it became apparent that the current IPP limits for TKN were likely based on "text book" criteria established for conventional domestic wastewater. The current limits are mass based limits of 29 pounds per day (#/day) daily maximum and 15 #/day monthly average. At the maximum permitted flow rate of 70,000 gallons per day (gpd), these mass limits equate to 50 milligrams per liter (mg/L) daily maximum and 25 mg/L monthly average. The 25 mg/L for monthly average can be found in some literature as the strength of low level domestic wastewater. It should be noted that at the time that the original IPP was developed and issued, TKN was substantially lower in the influent to the SNF pretreatment facility and was not considered to be a concern regarding treatment and compliance.

Nitrogen is regarded by the State and Federal regulatory authorities as a conventional pollutant which allows local pretreatment limits to be established by the publicly owned treatment works (POTW).

These limits can be determined based on site specific conditions, including discharge limits for the POTW, type of treatment employed, other sources of nitrogen, etc.

Based on a limited review of the City's monitoring reports, there appears to be capacity for the City to accept additional nitrogen without causing permit violations or any other issues associated with performance of the POTW. The City's POTW is an aerated lagoon type system with discharge to a pine tree land application system that includes an under drain system. The under drain system discharges to surface waters authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The only nitrogen limits in this permit are the standard limits of 10 mg/L nitrates in the down gradient groundwater monitoring wells. According to the City's 2014 quarterly monitoring reports the down gradient monitoring wells averaged 0.25 mg/L nitrates with one well showing non-detect.

On behalf of SNF, in December 2014, Brian Rindt of Rindt-McDuff Associates (RMA) met with Alan Leake of the Georgia Environmental Protection Division (EPD) to discuss the possibility for applying technology based, sound local IPP limits for TKN and/or ammonia at SNF, as opposed to the somewhat arbitrary limits in the current IPP. Mr. Leake concurred that the EPD would be amenable to change the limits based on applying acceptable EPD protocols in calculating IPP limits, assuming concurrence by the City and that there are no contradicting City Ordinances.

MEETING RESULTS AND ACTION ITEMS: A meeting was held between the City and SNF Floquip on January 8, 2015, to discuss the possibility of adjusting the IPP limit in the SNF – Riceboro permit. A list of attendees is provided above.

The following are the results of this meeting, in no particular order:

1. In general, the City and their engineers (P. C. Simonton and Associates) support and concur with the concept of increased nitrogen limits.
2. The City will provide Discharge Monitoring Reports (DMRs) for the year 2014.
3. RMA and SNF will be responsible for coordinating with the EPD. The City and its engineer will be invited to any meetings with the EPD relative to this effort.
4. It will be necessary for additional sampling and testing be performed. RMA will establish and conduct a sampling program at the City POTW to prepare a mass nitrogen balance to include sampling for appropriate nitrogen species at:
    a. Plant influent
    b. Lagoon effluent
    c. Holding pond effluent
    d. NPDES discharge(under drain)
    e. Groundwater monitoring wells

    Initially, sampling will be daily for up to two weeks, including weekends. Afterwards, sampling will be reduced to once or twice weekly for up to two months. This is a preliminary schedule and subject to change. The City has agreed to provide access for sampling. Russ St John will be responsible for sample collection and data assimilation.
5. Once all of the necessary data is assimilated, RMA will perform the calculations for establishing a defensible IPP limits for nitrogen at SNF using EPD approved protocols. Again, the City and P. C. Simonton will be provided copies for review and comment.
6. RMA will be responsible for obtaining necessary data, performing EPD approved protocols for calculating local limits, preparing IPP permit application with supporting documentation, etc.
7. On behalf of the City, P. C. Simonton will review and approve all submittals associated with developing the local limit for nitrogen.

APPENDIX E

FATE OF NITROGEN STUDY

Fate of Nitrogen in Riceboro Wastewater Treatment Facility

Prepared by Rindt-McDuff Associates, Inc.

April 2015

The wastewater generated at the SNF polymer manufacturing plant in Riceboro, Georgia makes up approximately 70% of the wastewater flow to the City of Riceboro (City) wastewater treatment facility. The City has recently expanded their treatment plant from 100,000 gallons per day (gpd) to 350,000 gpd, in part to accommodate future expansion of the SNF facility. See Figure 1 which is an aerial photograph of the City treatment plant before and after the expansion.

The SNF plant utilizes an activated sludge pretreatment system that is permitted by the Georgia Environmental Protection Division (EPD). The SNF pretreatment permit limits the effluent Total Kjeldahl Nitrogen (TKN) to 29 lb/day (Daily Maximum) and 15 lb/day (Monthly Average). At the current permitted flow of 70,000 gpd, these TKN mass limits equate to 50 mg/l (Daily Maximum) and 25 mg/l (Monthly Average).

As a result of changes in the product mix at the SNF plant and anticipated plant growth, SNF is in need of an increase in its TKN, biochemical oxygen demand (BOD), and flow limits. The purpose of this analysis is to justify increased TKN limits to 58 lb/day (70 mg/L) - Daily Maximum and 30 lb/day (40 mg/L) - Monthly Average and an increase in permitted flow rate to 100,000 gpd.

TKN for typical untreated domestic sewage is 40 mg/L – medium strength and 70 mg/L – high strength (Wastewater Engineering Treatment and Reuse, Metcalf & Eddy, Fourth Edition, 2003). TKN is the sum of ammonia and organic-nitrogen.

The City is authorized to discharge under an NPDES permit for the underdrain system associated with a pine tree based land application system (LAS). While the Riceboro permit does not limit nitrogen compounds (other than the standard limit of 10 mg/l nitrates in the groundwater), under the facility's NPDES permit, nitrogen compounds are monitored as follows:

- "Report" Ammonia - One/Quarter from the Underdrain Collection System

- Nitrate – One per Quarter in the monitoring wells
- Nitrate – One per Quarter in the surface water

The SNF Nitrogen Contribution

SNF manufacturers a variety of different polymer-related products. The amount of the various products manufactured in a given time-frame generally depends on the demand for that product. Two such polymer-based products are non-ionic and anionic polyacrylamides. These polyacrylamides consist of carbon, hydrogen, oxygen and nitrogen, generally in the following ratios: $C_5H_8O_3N$. Accordingly, this organic molecule consists of approximately 9% nitrogen by weight. These polyacrylamides exert a high COD initially, but it appears from various treatment data, that the COD is converted to BOD through hydrolysis and biological activity at a somewhat slower rate than other polymers produced by SNF.

As shown in Figure 2, this slow-conversion phenomenon manifests itself at the SNF wastewater pretreatment facility as influent COD values in the range of 2,000 to 6,000 mg/l, and influent TKN values in the range of 200 to 300 mg/l. The influent TKN consists of roughly (on average) 30 to 50% ammonia. The ammonia portion of the TKN is typically well nitrified during the SNF treatment process providing effluent ammonia values of 5 to 30 mg/l. In addition, a portion of the nitrified ammonia is derived from the conversion of organic-nitrogen contained in the polyacrylamides to ammonia. The typical effluent TKN range is 50 to 100 mg/l. And, knowing that the un-converted polyacrylamides molecules also exert a COD, the SNF effluent COD values are typically found in the range of 1,000 to 2,000 mg/l. (Note, however, that effluent BOD are less than 100 mg/l.) Furthermore the residual TKN (and COD associated with the polyacrylamides) leaving the SNF treatment plant receive further treatment at the Riceboro treatment facility.

The Riceboro Treatment Facility

During January and February of 2015 SNF collected a number of samples throughout the Riceboro treatment system as shown in Figure 3. Figure 4 shows the location of the monitoring wells. Figure 5 is a graph showing the fate of the nitrogen as it passes through the City treatment system.

On average (of 6 samples), the influent TKN at the Riceboro treatment facility was found to be 42.8 mg/l with an average ammonia component of the TKN of 16.3 mg/l. During the treatment process in the Riceboro ponds, the TKN was found to have been reduced (42.8 mg/l to 40.9 mg/l), and the ammonia increased (16.3 mg/l to 27.7 mg/l). This increase in ammonia cannot be entirely explained from the data; however, it is reasonable to assume that some of the remaining portion of organic-nitrogen from SNF was being converted (hydrolyzed) to ammonia. Very little nitrification was observed given the fact that the average nitrates through the Riceboro treatment system decreased from 1.9 mg/l to 0.5 mg/l (likely indicating some amount of denitrification).

Samples taken at the effluent end of the Riceboro holding pond indicated a significant reduction in TKN and ammonia without an associated increase in nitrates. The nitrogen concentrations exiting the holding pond (and therefore becoming the irrigation water into the LAS fields) are as follows:

TKN = 22.0 mg/l
Ammonia = 8.8 mg/l
Nitrates = 0.37 mg/l
Nitrites = 0.22 mg/l

In reviewing the Discharge Monitoring Reports for Riceboro for the nine months from May, 2014 through January 2015, the average flow was 0.083 MGD. See Figure 6.

Riceboro LAS Nitrogen Assimilation

The Riceboro LAS consists of six ten acre tracts of pine trees. The EPD "Guidelines for Slow-Rate Land Treatment of Wastewater via Spray Irrigation" indicate that the Average Annual Nitrogen Uptake for "Loblolly Pine with Understory" (Table 3.8-2) is 250 lb/acre/year. For the 60 acres of sprayfields utilized by the Riceboro LAS, this loading rate would equate to a maximum nitrogen application rate of (250*60) 15,000 lb/year. Looking at Figure 3 (page 2), the total nitrogen applied to the irrigation zones from the storage pond was 22.59 mg/l. At an application rate of 22.59 mg/l of total nitrogen being applied, and an assumed average daily flow of 100,000 gpd, the total nitrogen loading sent to the LAS would be 6,877 lb/year, less than one-half of the available nitrogen loading.

Monitoring Well Results

SNF sampled the following Riceboro monitoring wells during January and February of 2015. Additionally, seven quarterly monitoring well results were obtained from records related to Riceboro's quarterly monitoring reports as required by permit. The monitoring wells sampled and tested were as follows:

Upgradient: U1
Within the Sprayfields: M1, M2 and M3
Down gradient: D1, D2, D3 and D3A

The overall average monitoring well nitrate testing results are shown below:

	Upgradient Monitoring Wells	Middle Monitoring Wells	Downgradient Monitoring Wells
Riceboro	1.014	1.349	0.396
SNF	1.20	2.82	0.144
Average	1.11	2.08	0.27

The distribution of nitrogen compounds in the monitoring wells (as tested by SNF) is shown in Figure 3, and the table below:

	Upgradient Monitoring Wells	Middle Monitoring Wells	Downgradient Monitoring Wells
Ammonia	1.3	0.70	0.34
TKN	5.67	2.63	0.64
Nitrate	1.20	2.82	0.14
Nitrite	0.11	0.08	0.05

Interestingly, the ammonia and TKN found in the upgradient monitoring well was greater than the concentrations found in the middle and down gradient monitoring wells.

Figure 7 shows the monitoring well testing results for nitrates from the SNF sampling as well as from the City's quarterly monitoring.

The groundwater component of principal concern, nitrate, was found to be higher in the middle monitoring wells when compared to the upgradient and down gradient monitoring wells, as expected. However the fact that the upgradient monitoring well nitrates exceeded the downgradient monitoring well nitrates was unexpected.

The average nitrate concentration found in the down gradient monitoring wells was 0.27 mg/l. The MCL for nitrate is 10 mg/l. Therefore, it would appear that the LAS is very effective at removing nitrogen.

The flow in the underdrain system has been routinely found to be zero in recent years.

Conclusions

1. TKN in the SNF wastewater treatment plant effluent ranges between 50 to 100 mg/l.

2. The TKN found in the City of Riceboro WWTP was found to range from 26.2 to 74.1 mg/l with an average value of 42.8 mg/l.

3. The City of Riceboro treatment ponds (including the holding pond) were found to be very effective at removing TKN. The TKN found at the effluent end of the Riceboro holding pond ranged from 6 to 36 mg/l, with an average of 22 mg/l.

4. The City of Riceboro LAS is very effective at removing nitrogen from the sprayed wastewater effluent. The middle "M" monitoring wells had an average nitrate concentration of 2.08 mg/l.

5. The City of Riceboro down gradient monitoring wells were shown to have an average nitrate concentration of 0.27 mg/l.

6. The City of Riceboro WWTP is clearly capable of handling greater quantities of TKN without adversely impacting the surrounding groundwater.

FIG

Riceboro, Georgia LAS Sampling

	treatment Pond Influent	treatment Pond effluent	Storage Pond effluent	U1	M1	M2	M3	D1	D2	D3
1/22/2015										
Ammonia	21.1	36.2	13.0	2.74	1.79	1.66	1.17	1.39	1.34	0.1
TKN	26.2	46	21.7	8.1	4.8	1.7	0.4	2.2	0.4	0.4
Nitrate	0.05	0.41	0.34		1.4	2.2	3.4	0.05	0.05	0.32
Nitrite	0.05	0.21	0.29		0.05	0.05	0.05	0.05	0.05	0.05
1/23/2015										
Ammonia		36.9	11.4	0.65	0.54	0.17	0.1	0.16	0.22	0.1
TKN		40.4	36	7.8	4.8	1.3	0.4	1.2	0.4	0.4
Nitrate		0.42	0.31	0.3	1.5	1.9	3.7	0.05	0.05	0.32
Nitrite		0.19	0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1/30/2015										
Ammonia	18.9	29.3	10.9		1.02	0.28	0.18	0.28	0.22	0.22
TKN	74.1	36.6	22.2		4.8	2.4	0.4	0.4	0.4	0.4
Nitrate	0.05	0.5	0.35		6.9	1.2	3.9	0.05	0.05	0.36
Nitrite	0.05	0.16	0.23		0.05	0.05	0.05	0.05	0.05	0.05
2/3/2015										
Ammonia	11.7	23.2	6.86		0.43	0.22	0.28	0.2	0.1	0.22
TKN	33.4	36.8	23.7		5.3	1.8	0.4	1.6	0.4	0.4
Nitrate	0.05	0.56	0.41		4.0	1.4	3.8	0.05	0.05	0.36
Nitrite	0.05	0.23	0.22		0.33	0.05	0.32	0.05	0.05	0.05
2/5/2015										
Ammonia	18.9	21.1	6.7		2.35	0.79	0.1	2.07	0.2	0.13
TKN	50.9	41.3	22.6		5.7	1.6	0.4	1.1	0.6	0.4
Nitrate	0.05	0.57	0.37		2.1	1.7	3.8	0.05	0.05	0.35
Nitrite	0.05	0.23	0.2		0.05	0.05	0.05	0.05	0.05	0.05
2/11/2015										
Ammonia	12.2	19.5	3.92		1.04	0.4	0.1	0.1	0.17	0.1
TKN	34.8	44.1	6		9.0	2.3	7.3	3.1	5.3	3.4
Nitrate	9.1	0.49	0.44		2.4	1.6	3.1	0.05	0.05	0.35
Nitrite	0.40	0.26	0.17		0.05	0.05	0.05	0.05	0.05	0.05
2/13/2015										
Ammonia	15.1	NT	NT	0.38	NT	NT	NT	NT	NT	NT
TKN	37.6	NT	NT	1.1	NT	NT	NT	NT	NT	NT
Nitrate	NT	NT	NT	2.1	NT	NT	NT	NT	NT	NT
Nitrite	NT	NT	NT	0.17	NT	NT	NT	NT	NT	NT

FIGUR

	treatment Pond Influent	treatment Pond effluent	Storage Pond effluent	U1	M1	M2	M3	D1	D2	D3
Average										
Ammonia	16.3	27.7	8.8	1.26	1.20	0.59	0.32	0.70	0.38	0.15
TKN	42.8	40.9	22.0	5.67	5.73	1.76	0.40	1.30	0.44	0.40
Nitrate	1.9	0.5	0.4	1.20	3.05	1.68	3.72	0.05	0.05	0.34
Nitrite	0.1	0.2	0.2	0.11	0.10	0.05	0.10	0.05	0.05	0.05

Averages

	Pond treatment Influent	Pond treatment effluent	Pond Storage effluent	Wells Monitoring Upgradient	Wells Monitoring Middle	Wells Monitoring Downgradient
Ammonia	16.3	27.7	8.8	1.26	0.70	0.34
TKN	42.8	40.9	22.0	5.67	2.63	0.64
Nitrate	1.86	0.49	0.37	1.20	2.8	0.14
Nitrite	0.12	0.21	0.22	0.11	0.084	0.05

	Wells Monitoring Upgradient
Ammonia	1.3
TKN	5.67
Nitrate	1.20
Nitrite	0.11

Riceboro Monitoring Well Nitrates

	U1	M1	M2	M3	D1	D2	D3
3/26/2013	1.0	2.1	0.88		1.3	0.06	1.4
6/26/2013	0.05	0.05	2.1		0.1	0.05	1.2
9/19/2013	0.54	1.0	0.42		0.6	1.0	0.05
12/13/2013	1.2	1.9	0.09		1.0	0.09	0.83
6/16/2014	2.37	2.93	2.84	0.25	0.25	0.25	0.25
9/16/2014	1.29	0.222	2.56	1.64	0.25	0.25	0.351
12/17/2014	0.649	0.05	1.48	2.27	0.25	0.25	0.3
Ave	1.01	1.18	1.48	1.39	0.54	0.28	0.63

APPENDIX D

Letter of Concurrence from the City of Riceboro (2020)

CITY OF RICEBORO

September 22, 2020

Ms. Shamekia McGriff
Env/PSM Compliance Officer
SNF Floquip
2 Chemical Plant Rd.
Riceboro, GA 31323

Re: Requested Modifications
SNF Industrial Pretreatment Permit (GAP050246)

Dear Ms. McGriff:

Our engineering consulting firm, P.C. Simonton Engineering has reviewed the various data associated with the request by SNF Holding Company, Inc. to amend its Pretreatment to increase the flow and the TKN. Obviously, any permit increase by SNF has the potential to impact the City's wastewater treatment system. Fortunately, the City has already increased the capacity of the Riceboro wastewater treatment system in anticipation of the future growth needs of the City and at the SNF plant. It is our engineer's opinion that the recent expansion will allow us to treat a more concentrated influent from SNF, at least until the flow at the plant approaches the new capacity. In order to fully protect the City's wastewater treatment system, we have included a monitoring plan, to which all parties have agreed, to test and evaluate groundwater nitrogen levels on a quarterly basis. This monitoring program will include all measured parameters but will specifically focus on nitrogen and nitrates in the groundwater. If nitrate levels reach a level of 3 mg/l in the downstream monitoring wells it will trigger an immediate action. That action will be to add treatment capabilities at the plant and initiate a mitigation plan to resolve any treatment problems at the plant as a direct result of this increased concentrations. This action would be taken by the City but would be at the expense of SNF Holding.

Based on my review of the various data provided by SNF and their consultants plus the plan for monitoring and future expansion/mitigation, the City concurs in the requested permit increase by SNF. Additionally, should the SNF wastewater discharge create operational problems at the City's treatment system, SNF has agreed to provide funding and fully cooperate with action necessary to alleviate the problems.

The discharge limits requested by SNF are shown below:

Parameters	Daily Max	Monthly Average
Flow (mgd)	100,000	100,000
Bods (mg/e)	292	250
TSS (mg/e)	292	250
Oli & Grease (mg/e)	83	50
TKN (mg/e)	58	40

Should you have any questions, comments or desire additional information please contact me or our engineer Paul Simonton.

Sincerely,

J. Harris

Joseph Harris
Mayor, City of Riceboro, GA

Cc: Simonton Engineering
SE 2020-15

APPENDIX E

Local Limits Evaluation and Effluent Limit Calculations

Primary Treatment

Local Limits Determination Based on NPDES Daily Effluent Limits **TABLE** **1**

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE | MAXIMUM LOADING | INDUSTRIAL

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Daily Limit (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.1	0.35			0	0.25	-	0	-	-	10
Arsenic	0.1	0.35			0.007	0.25	-	0.014595	-	-	10
BOD	0.1	0.35	87.5	45	250	0.25	1050.84	521.25	424.506	509	10
Cadmium	0.1	0.35			0.008	0.25	-	0.01668	-	-	10
Chromium	0.1	0.35			0.006	0.25	-	0.01251	-	-	10
Hex. Chrom.	0.1	0.35			0.034	0.25	-	0.07089	-	-	10
COD	0.1	0.35			0	0.25	-	0	-	-	10
Copper	0.1	0.35			0.14	0.25	-	0.2919	-	-	10
Cyanide	0.1	0.35			0.082	0.25	-	0.17097	-	-	10
Lead	0.1	0.35			0.058	0.25	-	0.12093	-	-	10
Mercury	0.1	0.35			0.002	0.25	-	0.00417	-	-	10
Nickel	0.1	0.35			0.047	0.25	-	0.097995	-	-	10
Oil & Grease	0.1	0.35			0	0.25	-	0	-	-	10
Phosphorus	0.1	0.35			0.7	0.25	-	1.4595	-	-	10
Silver	0.1	0.35			0.019	0.25	-	0.039615	-	-	10
TSS	0.1	0.35	92	45	250	0.25	1641.9375	521.25	956.49375	1146.875	10
TTO	0.1	0.35			0	0.25	-	0	-	-	10
Zinc	0.1	0.35			0.231	0.25	-	0.481635	-	-	10

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

(Qpotw) POTW's average influent flow in MGD.

(Rpotw) Removal efficiency across POTW as percent. (in this case = to Rprim)

(Ccrit) NPDES daily maximum permit limit for a particular pollutant in mg/l.

(Qdom) Domestic/commercial background flow in MGD.

(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l. (based on EPA numbers from 1991)

(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

(Lind) Maximum allowable industrial loading to the POTW in pounds per day.

(Cind) Industrial allowable local limit for a given pollutant in mg/l.

(SF) Safety factor as a percent.

8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rpotw}$$

::

TABLE 2

Local Limits Determination Based on NPDES Monthly Effluent Limits

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE					MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rpotw)	NPDES Monthly Limit (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.1	0.35	0		0	0.25	-	0	-	-	10
Arsenic	0.1	0.35	0		0.007	0.25	-	0.014595	-	-	10
BOD	0.1	0.35	87.5	65	250	0.25	1517.88	521.25	844.842	1013	10
Cadmium	0.1	0.35	0		0.008	0.25	-	0.01668	-	-	10
Chromium	0.1	0.35	0		0.006	0.25	-	0.01251	-	-	10
Hex. Chrom.	0.1	0.35	0		0.034	0.25	-	0.07089	-	-	10
COD	0.1	0.35	0		0	0.25	-	0	-	-	10
Copper	0.1	0.35	0		0.14	0.25	-	0.2919	-	-	10
Cyanide	0.1	0.35	0		0.082	0.25	-	0.17097	-	-	10
Lead	0.1	0.35	0		0.058	0.25	-	0.12093	-	-	10
Mercury	0.1	0.35	0		0.002	0.25	-	0.00417	-	-	10
Nickel	0.1	0.35	0		0.047	0.25	-	0.097995	-	-	10
Oil & Grease	0.1	0.35	0		0	0.25	-	0	-	-	10
Phosphorus	0.1	0.35	0		0.7	0.25	-	1.4595	-	-	10
Silver	0.1	0.35	0		0.019	0.25	-	0.039615	-	-	10
TSS	0.1	0.35	92	65	250	0.25	2371.6875	521.25	1613.2688	1934.375	10
TTO	0.1	0.35	0		0	0.25	-	0	-	-	10
Zinc	0.1	0.35	0		0.231	0.25	-	0.481635	-	-	10

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

(Qpotw) POTW's average influent flow in MGD.

(Rpotw) Removal efficiency across POTW as percent.

(Ccrit) NPDES monthly maximum permit limit for a particular pollutant in mg/l.

(Qdom) Domestic/commercial background flow in MGD.

(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.

(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

(Lind) Maximum allowable industrial loading to the POTW in pounds per day.

(Cind) Industrial allowable local limit for a given pollutant in mg/l.

(SF) Safety factor as a percent.

8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qpotw}{1 - Rpotw}$$

::

Primary Treatment

TABLE 3

Local Limits Determination Based on Activated Sludge Inhibition Level

N/A - City of Riceboro does not have Activated Sludge

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rprim)	Activated Sludge Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.1	0.35			0	0.25	-	0	-	-	10
Arsenic	0.1	0.35			0.007	0.25	-	0.014595	-	-	10
BOD	0.1	0.35			250	0.25	-	521.25	-	-	10
Cadmium	0.1	0.35			0.008	0.25	-	0.01668	-	-	10
Chromium	0.1	0.35			0.006	0.25	-	0.01251	-	-	10
Hex. Chrom.	0.1	0.35			0.034	0.25	-	0.07089	-	-	10
COD	0.1	0.35			0	0.25	-	0	-	-	10
Copper	0.1	0.35			0.14	0.25	-	0.2919	-	-	10
Cyanide	0.1	0.35			0.082	0.25	-	0.17097	-	-	10
Lead	0.1	0.35			0.058	0.25	-	0.12093	-	-	10
Mercury	0.1	0.35			0.002	0.25	-	0.00417	-	-	10
Nickel	0.1	0.35			0.047	0.25	-	0.097995	-	-	10
Oil & Grease	0.1	0.35			0	0.25	-	0	-	-	10
Phosphorus	0.1	0.35			0.7	0.25	-	1.4595	-	-	10
Silver	0.1	0.35			0.019	0.25	-	0.039615	-	-	10
TSS	0.1	0.35			250	0.25	-	521.25	-	-	10
TTO	0.1	0.35			0	0.25	-	0	-	-	10
Zinc	0.1	0.35			0.231	0.25	-	0.481635	-	-	10

(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw)	POTW's average influent flow in MGD.
(Rprim)	Removal efficiency across across primary treatment as percent.
(Ccrit)	Activated sludge threshold inhibition level, mg/l.
(Qdom)	Domestic/commercial background flow in MGD.
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.
(SF)	Safety factor as a percent.
8.34	Unit conversion factor
Lhw =	8.34 * Ccrit * Qpotw / (1 - Rprim)

::

TABLE 4

Local Limits Determination Based on Nitrification Inhibition Level

N/A - City of Riceboro does not have nitrificaton

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE						MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Removal Efficiency (%) (Rsec)	Nitrification Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.1	0.35			0	0.25	-	0	-	-	10
Arsenic	0.1	0.35			0.007	0.25	-	0.014595	-	-	10
BOD	0.1	0.35			250	0.25	-	521.25	-	-	10
Cadmium	0.1	0.35			0.008	0.25	-	0.01668	-	-	10
Chromium	0.1	0.35			0.006	0.25	-	0.01251	-	-	10
Hex. Chrom.	0.1	0.35			0.034	0.25	-	0.07089	-	-	10
COD	0.1	0.35			0	0.25	-	0	-	-	10
Copper	0.1	0.35			0.14	0.25	-	0.2919	-	-	10
Cyanide	0.1	0.35			0.082	0.25	-	0.17097	-	-	10
Lead	0.1	0.35			0.058	0.25	-	0.12093	-	-	10
Mercury	0.1	0.35			0.002	0.25	-	0.00417	-	-	10
Nickel	0.1	0.35			0.047	0.25	-	0.097995	-	-	10
Oil & Grease	0.1	0.35			0	0.25	-	0	-	-	10
Phosphorus	0.1	0.35			0.7	0.25	-	1.4595	-	-	10
Silver	0.1	0.35			0.019	0.25	-	0.039615	-	-	10
TSS	0.1	0.35			250	0.25	-	521.25	-	-	10
TTO	0.1	0.35			0	0.25	-	0	-	-	10
Zinc	0.1	0.35			0.231	0.25	-	0.481635	-	-	10

(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.
(Qpotw)	POTW's average influent flow in MGD.
(Rsec)	Removal efficiency across primary treatment and secodary treatment as percent.
(Ccrit)	Nitrification threshold inhibition level, mg/l.
(Qdom)	Domestic/commercial background flow in MGD.
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.
(SF)	Safety factor as a percent.
8.34	Unit conversion factor
Lhw =	8.34 * Ccrit * Qpotw / (1 - Rsec)
::	

Primary Treatment

						TABLE	5						
	Local Limits Determination Based on USEPA 503 Sludge Regulation						**N/A - City of Riceboro does not have sludge disposal; sludge disinegrates within t**						
	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE								MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut.	POTW	Sludge	Percent	Removal	503 Sludge	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
Pollutant	Flow	Flow	Flow	Solids	Efficiency	Criteria	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(MGD)	(MGD)	(MGD)	(%)	(%)	(mg/kg)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)
	(Qind)	(Qpotw)	(Qsldg)	(PS)	(Rpotw)		(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)
Ammonia-N	0.1	0.35			0		0	0.25	-	0	-	-	10
Arsenic	0.1	0.35			0		0.007	0.25	-	0.014595	-	-	10
BOD	0.1	0.35			87.5		250	0.25	-	521.25	-	-	10
Cadmium	0.1	0.35			0		0.008	0.25	-	0.01668	-	-	10
Chromium	0.1	0.35			0		0.006	0.25	-	0.01251	-	-	10
Hex. Chrom.	0.1	0.35			0		0.034	0.25	-	0.07089	-	-	10
COD	0.1	0.35			0		0	0.25	-	0	-	-	10
Copper	0.1	0.35			0		0.14	0.25	-	0.2919	-	-	10
Cyanide	0.1	0.35			0		0.082	0.25	-	0.17097	-	-	10
Lead	0.1	0.35			0		0.058	0.25	-	0.12093	-	-	10
Mercury	0.1	0.35			0		0.002	0.25	-	0.00417	-	-	10
Nickel	0.1	0.35			0		0.047	0.25	-	0.097995	-	-	10
Oil & Grease	0.1	0.35			0		0	0.25	-	0	-	-	10
Phosphorus	0.1	0.35			0		0.7	0.25	-	1.4595	-	-	10
Silver	0.1	0.35			0		0.019	0.25	-	0.039615	-	-	10
TSS	0.1	0.35			92		250	0.25	-	521.25	-	-	10
TTO	0.1	0.35			0		0	0.25	-	0	-	-	10
Zinc	0.1	0.35			0		0.231	0.25	-	0.481635	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.												
(Qpotw)	POTW's average influent flow in MGD.												
(Qsldg)	Sludge flow to disposal in MGD.												
(PS)	Percent solids of sludge to disposal.												
(Rpotw)	Removal efficiency across POTW as a percent.												
(Cslcrit)	503 sludge criteria in mg/kg dry sludge.												
(Qdom)	Domestic/commercial background flow in MGD.												
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.												
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).												
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).												
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.												
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.												
(SF)	Safety factor as a percent.												
8.34	Unit conversion factor												
Lhw =	8.34 * Cslcrit * (PS/100) * Qsldg												
	Rpotw												
::													

Primary Treatment

						TABLE	6						
		Local Limits Determination Based on State Sludge Criteria					N/A - City of Riceboro does not have sludge disposal; sludge disinegrates within t						
	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE								MAXIMUM LOADING		INDUSTRIAL		
	IU Pollut.	POTW	Sludge	Percent	Removal	State Sludge	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
Pollutant	Flow	Flow	Flow	Solids	Efficiency	Criteria	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(MGD)	(MGD)	(MGD)	(%)	(%)	(mg/kg)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)
	(Qind)	(Qpotw)	(Qsldg)	(PS)	(Rpotw)	(Cslcrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)
Ammonia-N	0.1	0.35	0	0	0	0	0	0.25	-	0	-	-	10
Arsenic	0.1	0.35	0	0	0	0	0.007	0.25	-	0.014595	-	-	10
BOD	0.1	0.35	0	0	87.5	0	250	0.25	-	521.25	-	-	10
Cadmium	0.1	0.35	0	0	0	0	0.008	0.25	-	0.01668	-	-	10
Chromium	0.1	0.35	0	0	0	0	0.006	0.25	-	0.01251	-	-	10
Hex. Chrom.	0.1	0.35	0	0	0	0	0.034	0.25	-	0.07089	-	-	10
COD	0.1	0.35	0	0	0	0	0	0.25	-	0	-	-	10
Copper	0.1	0.35	0	0	0	0	0.14	0.25	-	0.2919	-	-	10
Cyanide	0.1	0.35	0	0	0	0	0.082	0.25	-	0.17097	-	-	10
Lead	0.1	0.35	0	0	0	0	0.058	0.25	-	0.12093	-	-	10
Mercury	0.1	0.35	0	0	0	0	0.002	0.25	-	0.00417	-	-	10
Nickel	0.1	0.35	0	0	0	0	0.047	0.25	-	0.097995	-	-	10
Oil & Grease	0.1	0.35	0	0	0	0	0	0.25	-	0	-	-	10
Phosphorus	0.1	0.35	0	0	0	0	0.7	0.25	-	1.4595	-	-	10
Silver	0.1	0.35	0	0	0	0	0.019	0.25	-	0.039615	-	-	10
TSS	0.1	0.35	0	0	92	0	250	0.25	-	521.25	-	-	10
TTO	0.1	0.35	0	0	0	0	0	0.25	-	0	-	-	10
Zinc	0.1	0.35	0	0	0	0	0.231	0.25	-	0.481635	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.												
(Qpotw)	POTW's average influent flow in MGD.												
(Qsldg)	Sludge flow to disposal in MGD.												
(PS)	Percent solids of sludge to disposal.												
(Rpotw)	Removal efficiency across POTW as a percent.												
(Cslcrit)	State sludge criteria in mg/kg dry sludge.												
(Qdom)	Domestic/commercial background flow in MGD.												
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.												
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).												
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).												
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.												
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.												
(SF)	Safety factor as a percent.												
8.34	Unit conversion factor												
Lhw =	8.34 * Cslcrit * (PS/100) * Qsldg												
	Rpotw												
::													

Primary Treatment

						TABLE	7						
		Local Limits Determination Based on Chronic Water Quality Standards						**N/A - City of Riceboro land applies the effluent from storage pond.**					
	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE								MAXIMUM LOADING		INDUSTRIAL		
	Hardness:	69											
	IU Pollut.	POTW	Upstream	Upstream	Removal	Chronic	Domestic and	Commercial	Allowable	Domestic/	Allowable	Local	Safety
Pollutant	Flow	Flow	Flow	Conc.	Efficiency	WQS	Conc.	Flow	Headworks	Commercial	Loading	Limit	Factor
	(MGD)	(MGD)	(MGD)	(mg/l)	(%)	(mg/l)	(mg/l)	(MGD)	(lbs/day)	(lbs/day)	(lbs/day)	(mg/l)	(%)
	(Qind)	(Qpotw)	(Qstr)	(Cstr)	(Rpotw)	(Ccrit)	(Cdom)	(Qdom)	(Lhw)	(Ldom)	(Lind)	(Cind)	(SF)
Ammonia-N	0.1	0.35	0.517		80			0.25	-	0	-	-	10
Arsenic	0.1	0.35	0.517		45			0.25	-	0	-	-	10
BOD	0.1	0.35	0.517		87.5			0.25	-	0	-	-	10
Cadmium*	0.1	0.35	0.517		67			0.25	-	0	-	-	10
Chromium*	0.1	0.35	0.517		82			0.25	-	0	-	-	10
Hex. Chrom.	0.1	0.35	0.517		0			0.25	-	0	-	-	10
COD	0.1	0.35	0.517		0			0.25	-	0	-	-	10
Copper*	0.1	0.35	0.517		88			0.25	-	0	-	-	10
Cyanide	0.1	0.35	0.517		69			0.25	-	0	-	-	10
Lead*	0.1	0.35	0.517		61			0.25	-	0	-	-	10
Mercury	0.1	0.35	0.517		60			0.25	-	0	-	-	10
Nickel*	0.1	0.35	0.517		42			0.25	-	0	-	-	10
Oil & Grease	0.1	0.35	0.517		0			0.25	-	0	-	-	10
Phosphorus	0.1	0.35	0.517		0			0.25	-	0	-	-	10
Silver	0.1	0.35	0.517		75			0.25	-	0	-	-	10
TSS	0.1	0.35	0.517		92			0.25	-	0	-	-	10
TTO	0.1	0.35	0.517		0			0.25	-	0	-	-	10
Zinc*	0.1	0.35	0.517		75			0.25	-	0	-	-	10
(Qind)	Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.												
(Qpotw)	POTW's average influent flow in MGD.												
(Qstr)	Receiving stream (upstream) 7Q10 flow in MGD.												
(Cstr)	Receiving stream background level in mg/l.												
(Rpotw)	Removal efficiency across POTW as percent.												
(Ccrit)	State chronic water quality standard for a particular pollutant in mg/l.(expressed in dissolved fraction * at hardness = 50)												
(Qdom)	Domestic/commercial background flow in MGD.												
(Cdom)	Domestic/commercial background concentration for a particular pollutant in mg/l.												
(Lhw)	Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).												
(Ldom)	Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).												
(Lind)	Maximum allowable industrial loading to the POTW in pounds per day.												
(Cind)	Industrial allowable local limit for a given pollutant in mg/l.												
(SF)	Safety factor as a percent.												
8.34	Unit conversion factor												
Lhw =	8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))												
	1 - Rpotw												
::													

Primary Treatment

TABLE 8

Local Limits Determination Based on Acute Water Quality Standards

N/A - City of Riceboro land applies the effluent from storage pond.

ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE

Hardness: 69

Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Upstream Flow (MGD) (Qstr)	Upstream Conc. (mg/l) (Cstr)	Removal Efficiency (%) (Rpotw)	Acute WQS (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	MAXIMUM LOADING Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercial (lbs/day) (Ldom)	INDUSTRIAL Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N	0.1	0.35		0	80			0.25	-	0	-	-	10
Arsenic	0.1	0.35		0	45			0.25	-	0	-	-	10
BOD	0.1	0.35		0	87.5			0.25	-	0	-	-	10
Cadmium*	0.1	0.35		0	67			0.25	-	0	-	-	10
Chromium*	0.1	0.35		0	82			0.25	-	0	-	-	10
Hex. Chrom.	0.1	0.35		0	0			0.25	-	0	-	-	10
COD	0.1	0.35		0	0			0.25	-	0	-	-	10
Copper*	0.1	0.35		0	86			0.25	-	0	-	-	10
Cyanide	0.1	0.35		0	69			0.25	-	0	-	-	10
Lead*	0.1	0.35		0	61			0.25	-	0	-	-	10
Mercury	0.1	0.35		0	60			0.25	-	0	-	-	10
Nickel*	0.1	0.35		0	42			0.25	-	0	-	-	10
Oil & Grease	0.1	0.35		0	0			0.25	-	0	-	-	10
Phosphorus	0.1	0.35		0	0			0.25	-	0	-	-	10
Silver	0.1	0.35		0	75			0.25	-	0	-	-	10
TSS	0.1	0.35		0	92			0.25	-	0	-	-	10
TTO	0.1	0.35		0	0			0.25	-	0	-	-	10
Zinc	0.1	0.35		0	75			0.25	-	0	-	-	10

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

(Qpotw) POTW's average influent flow in MGD.

(Qstr) Receiving stream (upstream) 1Q10 flow in MGD.

(Cstr) Receiving stream background level in mg/l.

(Rpotw) Removal efficiency across POTW as percent.

(Ccrit) State acute water quality standard for a particular pollutant in mg/l.(expressed in dissolved fraction * at hardness = 50)

(Qdom) Domestic/commercial background flow in MGD.

(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.

(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

(Lind) Maximum allowable industrial loading to the POTW in pounds per day.

(Cind) Industrial allowable local limit for a given pollutant in mg/l.

(SF) Safety factor as a percent.

8.34 Unit conversion factor

Lhw = 8.34 * (Ccrit * (Qstr + Qpotw) - (Cstr * Qstr))

1 - Rpotw

::

TABLE 9

Local Limits Determination Based on Anaerobic Digester Inhibition Level

N/A - City of Riceboro does not have anaerobic digestor.

	ENVIRONMENTAL CRITERIA AND PROCESS DATA BASE							MAXIMUM LOADING		INDUSTRIAL		
Pollutant	IU Pollut. Flow (MGD) (Qind)	POTW Flow (MGD) (Qpotw)	Sludge Flow to Digester (MGD) (Qdig)	Removal Efficiency (%) (Rpotw)	Anaerobic Digester Inhibition Level (mg/l) (Ccrit)	Domestic and Conc. (mg/l) (Cdom)	Commercial Flow (MGD) (Qdom)	Allowable Headworks (lbs/day) (Lhw)	Domestic/ Commercia (lbs/day) (Ldom)	Allowable Loading (lbs/day) (Lind)	Local Limit (mg/l) (Cind)	Safety Factor (%) (SF)
Ammonia-N						0	0.5	-	0	-	-	10
Arsenic		0.35		0		0.007	0.35	-	0.020433	-	-	10
BOD	0.1	0.35		87.5		250	0.25	-	521.25	-	-	10
Cadmium	0.1	0.35		0		0.008	0.25	-	0.01668	-	-	10
Chromium	0.1	0.35		0		0.006	0.25	-	0.01251	-	-	10
Hex. Chrom.	0.1	0.35		0		0.034	0.25	-	0.07089	-	-	10
COD	0.1	0.35		0		0	0.25	-	0	-	-	10
Copper	0.1	0.35		0		0.14	0.25	-	0.2919	-	-	10
Cyanide	0.1	0.35		0		0.082	0.25	-	0.17097	-	-	10
Lead	0.1	0.35		0		0.058	0.25	-	0.12093	-	-	10
Mercury	0.1	0.35		0		0.002	0.25	-	0.00417	-	-	10
Nickel	0.1	0.35		0		0.047	0.25	-	0.097995	-	-	10
Oil & Grease	0.1	0.35		0		0	0.25	-	0	-	-	10
Phosphorus	0.1	0.35		0		0.7	0.25	-	1.4595	-	-	10
Silver	0.1	0.35		0		0.019	0.25	-	0.039615	-	-	10
TSS	0.1	0.35		92		250	0.25	-	521.25	-	-	10
TTO	0.1	0.35		0		0	0.25	-	0	-	-	10
Zinc	0.1	0.35		0		0.231	0.25	-	0.481635	-	-	10

(Qind) Industrial User total plant discharge flow in Million Gallons per Day (MGD) that contains a particular pollutant.

(Qpotw) POTW's average influent flow in MGD.

(Qdig) Sludge flow to digester in MGD.

(Rpotw) Removal efficiency across POTW as percent.

**dissolved metal inhibition

(Ccrit) Anaerobic digester threshold inhibition level in mg/l.

(Qdom) Domestic/commercial background flow in MGD.

(Cdom) Domestic/commercial background concentration for a particular pollutant in mg/l.

(Lhw) Maximum allowable headworks pollutant loading to the POTW in pounds per day (lbs/day).

(Ldom) Domestic/commercial background loading to the POTW for a particular pollutant in pounds per day (lbs/day).

(Lind) Maximum allowable industrial loading to the POTW in pounds per day.

(Cind) Industrial allowable local limit for a given pollutant in mg/l.

(SF) Safety factor as a percent.

8.34 Unit conversion factor

$$Lhw = \frac{8.34 * Ccrit * Qdig}{Rpotw}$$

TABLE 10

Local Limits Determination Based on Most Stringent Criteria or Domestic Levels

MONTHLY AVERAGE INDUSTRIAL EFFLUENT LIMITS - USING TOTAL INDUSTRIAL FLOW

Pollutant	Local Limit (mg/l)	Basis in Derivation of Limit	Local Limit Loading (kg/day)	Categorical Standards (mg/l)
Ammonia-N	0	D	0	
Arsenic	0.007	D	0.002653	
BOD	509	P	192.911	
Cadmium	0.008	D	0.003032	
Chromium	0.006	C	0.002274	
Hex. Chrom.	0.034	D	0.012886	
COD	0	D	0	
Copper	0.14	C	0.05306	
Cyanide	0.082	C	0.031078	
Lead	0.058	D	0.021982	
Mercury	0.002	D	0.000758	
Nickel	0.047	D	0.017813	
Oil & Grease	0	D	0	
Phosphorus	0.7	D	0.2653	
Silver	0.019	D	0.007201	
TSS	1146.875	P	434.66563	
TTO	0	D	0	
Zinc	0.231	D	0.087549	

D	Local Limit based on domestic or default values.
I	Local Limit based on activated sludge, nitrification or digester inhibition levels.
P	Local Limit based on NPDES Permit effluent limits.
S	Local Limit based on sludge regulations or criteria.
W	Local Limit based on chronic or acute water quality standards.
C	Local Limit based on Categorical Standard

SNF Holding Company
Pretreatment Permit No. GAP050246

40 CFR 414.111

(a) Any point source subject to this subpart must achieve discharges not exceeding the quantity (mass) determined by multiplying the process wastewater flow subject to this subpart times the concentration listed in the following table.

$$Mass\left(\frac{lb}{day}\right) = Q_{Process}\left(\frac{MG}{day}\right) \times 8.34\left(\frac{\frac{lb-L}{mg-MG}}{}\right) \times C_{Pollutant}\left(\frac{mg}{L}\right)$$

	30-day average		Daily Max.	
Process Wastewater Flowrate	(MGD)	(gpd)	(MGD)	(gpd)
Q	0.100	100,000	0.100	100,000

	30-day average			Daily Max.		
CONSTITUENT	(µg/L)	(mg/L)	(lb/d)	(µg/L)	(mg/L)	(lb/d)
Acenaphthene	19	0.019	0.016	47	0.047	0.039
Anthracene	19	0.019	0.016	47	0.047	0.039
Benzene	57	0.057	0.048	134	0.134	0.112
Bis(2-ethylhexyl) phthalate	95	0.095	0.079	258	0.258	0.215
Carbon Tetrachloride	142	0.142	0.118	380	0.380	0.317
Chlorobenzene	142	0.142	0.118	380	0.380	0.317
Chloroethane	110	0.110	0.092	295	0.295	0.246
Chloroform	111	0.111	0.093	325	0.325	0.271
Di-n-butyl phthalate	20	0.020	0.017	43	0.043	0.036
1,2-Dichlorobenzene	196	0.196	0.163	794	0.794	0.662
1,3-Dichlorobenzene	142	0.142	0.118	380	0.380	0.317
1,4-Dichlorobenzene	142	0.142	0.118	380	0.380	0.317
1,1-Dichloroethane	22	0.022	0.018	59	0.059	0.049
1,2-Dichloroethane	180	0.180	0.150	574	0.574	0.479
1,1-Dichloroethylene	22	0.022	0.018	60	0.060	0.050
1,2-trans-Dichloroethylene	25	0.025	0.021	66	0.066	0.055
1,2-Dichloropropane	196	0.196	0.163	794	0.794	0.662
1,3-Dichloropropylene	196	0.196	0.163	794	0.794	0.662
Diethyl phthalate	46	0.046	0.038	113	0.113	0.094
Dimethyl phthalate	19	0.019	0.016	47	0.047	0.039
4,6-Dinitro-o-cresol	78	0.078	0.065	277	0.277	0.231
Ethylbenzene	142	0.142	0.118	380	0.380	0.317
Fluoranthene	22	0.022	0.018	54	0.054	0.045
Fluorene	19	0.019	0.016	47	0.047	0.039
Hexachlorobenzene	196	0.196	0.163	794	0.794	0.662
Hexachlorobutadiene	142	0.142	0.118	380	0.380	0.317
Hexachloroethane	196	0.196	0.163	794	0.794	0.662
Methyl Chloride	110	0.110	0.092	295	0.295	0.246
Methylene Chloride	36	0.036	0.030	170	0.170	0.142
Naphthalene	19	0.019	0.016	47	0.047	0.039
Nitrobenzene	2237	2.237	1.866	6402	6.402	5.339
2-Nitrophenol	65	0.065	0.054	231	0.231	0.193
4-Nitrophenol	162	0.162	0.135	576	0.576	0.480
Phenanthrene	19	0.019	0.016	47	0.047	0.039
Pyrene	20	0.020	0.017	48	0.048	0.040
Tetrachloroethylene	52	0.052	0.043	164	0.164	0.137
Toluene	28	0.028	0.023	74	0.074	0.062
Total Cyanide	420	0.420	0.350	1200	1.200	1.001
Total Lead	320	0.320	0.267	690	0.690	0.575
Total Zinc	1050	1.050	0.876	2610	2.610	2.177
1,2,4-Trichlorobenzene	196	0.196	0.163	794	0.794	0.662
1,1,1-Trichloroethane	22	0.022	0.018	59	0.059	0.049
1,1,2-Trichloroethane	32	0.032	0.027	127	0.127	0.106
Trichloroethylene	26	0.026	0.022	69	0.069	0.058
Vinyl Chloride	97	0.097	0.081	172	0.172	0.143

SNF Holding Company
Pretreatment Permit No. GAP050246

	Previous Limit (lb/day)	Calculated Concentration (mg/L)	New Limit (lb/day)
Arsenic	0.007	0.012	0.010
Cadmium	0.008	0.014	0.012
Chromium	0.272	0.466	0.389
Copper	0.39	0.668	0.557
Cyanide	0.048	0.082	0.068
Lead	0.06	0.103	0.086
Mercury	0.003	0.005	0.004
Molybdenum	0.006	0.010	0.008
Nickel	0.038	0.065	0.054
Selenium	0.009	0.015	0.013
Silver	0.007	0.012	0.010